

The Dawn of the Big Data Era

Targeting World-Class Profitability

Question 01

Tokyo Electron achieved record-high profit¹ in fiscal 2019; how is the medium-term management plan progressing?

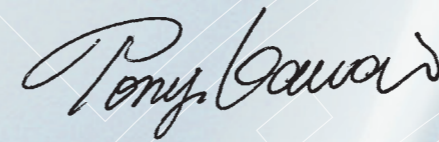
Tokyo Electron has been working to expand sales and profit in the key fields of etch, deposition and cleaning. We are focusing on these fields over the medium term in expectation of ongoing technological innovation and market expansion, and because they offer opportunities to leverage our accumulated technologies and business expertise.

Over the last five years, the wafer fab equipment (WFE)² market has rapidly expanded from around US\$30 billion to almost US\$60 billion. In that time, Tokyo Electron has reorganized its business units to combine best known methods for various products while advancing highly efficient product development through coordination between development and account sales divisions. These and other efforts have steadily grown our market share and significantly improved the profitability of our products. In addition, thanks to increases in our installed base

and support capabilities, the field solutions business (encompassing sales of parts and used equipment, modifications and maintenance services) has grown substantially. As a result, sales and profit growth has outpaced market growth, and we have reached the ROE target established in the medium-term management plan. We are very pleased with these achievements, which reaffirm that our business strategies are progressing as planned. Going forward, we will continue to improve product competitiveness, responsiveness to customers and productivity to realize further business expansion.

¹ Gross profit, operating income and net income attributable to owners of the parent reached record highs.

² Wafer fab equipment (WFE): The semiconductor production process is divided into front-end production, in which circuits are formed on wafers and inspected, and back-end production, in which wafers are cut into chips, assembled and inspected again. WFE refers to the production equipment used in front-end production and in wafer-level packaging production.



Toshiki Kawai
Representative Director
President & CEO



Question **02**

After several years of expansion, the WFE market is expected to contract in 2019.

What changes are occurring in Tokyo Electron's business environment?

Over the past two years in particular, we have seen brisk investment in expanding DRAM and NAND production capacity, reflecting increased memory in mobile devices and a shift in demand from HDDs to SSDs for personal computers and data centers. There has been a great deal of greenfield investment in NAND, due to the shift from 2D to 3D device structures. Semiconductor demand remains robust, but supply of CPUs, which are necessary for use with memory devices, has fallen behind, so memory device manufacturers are temporarily adjusting their capital investment. Furthermore, another factor behind the contraction is likely that some investment in

data centers is on hold as companies wait for the release of new CPUs and peripheral devices suitable for 5G applications.

Due to the shrinkage of the WFE market, Tokyo Electron forecasts a year-on-year decrease in net sales in fiscal 2020. The importance of semiconductors going forward, however, is not going anywhere. Taking the current market adjustment as an opportunity, in fiscal 2020, we are steadily investing in strategic technological development and human resources, with a focus on future growth. Maintaining industry-leading technological innovativeness is, I believe, crucial.

Question **03**

Could you explain how you arrived at the new financial model announced in May 2019?

In addition to the adjustment in investment by semiconductor manufacturers, we continue to monitor risks to the macro economy, such as the U.S.-China trade friction and Brexit negotiations.

However, as when we announced our previous financial model last year, we still expect continued growth in the semiconductor and flat panel display (FPD) markets over the medium and long




terms. With such developments as the IoT and 5G, all kinds of things will be connected to networks, and data traffic will grow exponentially. At the same time, the establishment of systems to process and analyze vast amounts of data, including data centers and AI, will accelerate the transition to the big data era. The expansion of applications and technological innovation in semiconductor and FPDs will power this transition.

We amended our financial model to reflect this medium- to long-term outlook. We retained the projections of the model announced last year for net sales and operating income and supplemented these with a new scenario of ¥2 trillion in net sales. We also removed the upper limit on ROE,

making our target simply "over 30%." We aim to realize growth in line with this model within five years. Previously, we linked our sales targets to projected WFE market size, but the new model intentionally drops this linkage. This decision reflects a shift in focus from the WFE market size estimates of external research institutions to the SAM³ in which we are focusing our efforts on business expansion and improved profitability. Going forward, we will strive to achieve an operating margin of over 30% and ROE of over 30%.

³ SAM: Served available market

 For details on the medium-term management plan, please visit our website. www.tel.com/ir/policy/mplan/

Financial Model (within 5 years)

Net sales	¥1,500 billion	¥1,700 billion	¥2,000 billion
Operating margin	26.5%	28%	>30%
ROE		>30%	

Question 04

How does Tokyo Electron aim to grow in the medium- to long-term in order to achieve the new financial model's targets?

The big data era is upon us, requiring even higher-performance semiconductors and FPDs. In turn, the technological requirements facing production equipment manufacturers are constantly growing more sophisticated. Boasting diverse technologies and a wide-ranging product lineup, Tokyo Electron is among the few manufacturers that can meet these rising expectations. We are focusing on fields where we expect ongoing technological innovation and market growth, and in which we can leverage our strengths, working to increase our market share and profitability.

As you know, Tokyo Electron is a manufacturer. We believe that constantly striving to provide the best products and best services on the market is the key to sustained growth. In line with this belief, we will invest ¥400 billion in research and development over the coming three years. We will also enhance development and production capabilities in etch and deposition, where we expect outsized growth. Tokyo Electron possesses technologies related to such key processes as lithography, etching, deposition and cleaning. To leverage these strengths and provide solutions that co-optimize multiple processes, we will

conduct joint development with customers from the early stages of each new technology node. In addition, by identifying and addressing technological needs and product requirements before mass production, we will further improve the efficiency of technology marketing and development. We will reflect the technological expertise gained through these initiatives in next-generation equipment to create a virtuous cycle, enhancing customer satisfaction and advancing development, always a step ahead of the competition.

Furthermore, we are targeting stable growth in the field solutions business by leveraging the insights provided by our installed base, which is the largest in the industry. Increasingly sophisticated process technologies are more reliant on proper maintenance to ensure that equipment consistently operates at optimal performance. By realizing high-value-added services, such as predictive maintenance using equipment operational data, we will provide support that maximizes uptime and improves yields for our customers. Through these measures, we aim to achieve the targets of the new financial model and increase corporate value over the long term.

Question 05

What led to the decision to implement a share repurchase of up to ¥150 billion, and what is your approach to using cash on hand going forward?

Our shareholder return policy is to maintain a payout ratio of 50% of net income attributable to owners of the parent and flexibly consider share repurchases. Based on this policy, annual cash dividends for fiscal 2019 came to ¥758 per share, a record high. The share repurchase announced in May 2019 is also in line with this policy. The decision to implement the buyback stems from our belief that our growth potential was not adequately reflected in our stock price, as well as our confidence that Tokyo Electron will realize profit growth going forward.

As for uses of cash on hand, investment in future growth is our foremost priority. Tokyo Electron's growth depends on continuously creating innovative technologies that solve the

constantly evolving challenges our customers face. In addition to our internal research and development, we will collaborate with consortia. We are often asked about M&A, and we do not rule out the possibility. M&A could be an option provided we can realistically expect solid return on investment, medium- to long-term business expansion, clear benefit to our stakeholders and increased shareholder value. When approaching such opportunities, however, we will also consider the potential for business collaboration. We will continue to manage our balance sheet appropriately with due consideration placed on our ability to generate cash, maintain necessary cash on hand and preserve capital for growth investments going forward.