Corporate Philosophy

We strive to contribute to the development of a dream-inspiring society through our leading-edge technologies and reliable service and support.

Management Policies

The Management Policies highlight the management values that Tokyo Electron regards as essential to achieving the objectives defined in its Corporate Philosophy. They express the logic that underscores our eight general rules of management.

- Profit is Essential
  The TEL Group aims to contribute to the development of society and industry and to the enhancement of corporate value while continually pursuing profit.

- Growth Philosophy
  We will tirelessly take on the challenges of technological innovation to achieve continuous growth through business expansion and market creation.

- Employees
  The TEL Group’s employees both create and fulfill company values, performing their work with creativity, a sense of responsibility, and a commitment to teamwork.

- Safety, Health, and the Environment
  The TEL Group gives the highest consideration to the safety and health of every person connected with our business activities as well as to the global environment.

- Scope of Business
  The TEL Group leads markets by providing high-quality products in leading-edge technology fields with a focus on electronics.

- Quality and Service
  The TEL Group strives to understand the true needs to achieve customer satisfaction and secure customer trust while continuously improving quality and service.

- Organizations
  The TEL Group builds optimal organizations that maximize corporate value in which all employees can realize their full potential.

- Social Responsibility
  Feeling a strong sense of corporate social responsibility, we strive to gain the esteem of society and to be a company where our employees are proud to work.
Practice of the Corporate Philosophy: Semiconductors and Displays in a “Digital × Green” Society

The previous year 2020 saw the global spread of COVID-19 and frequent natural disasters arising from climate change, including torrential rains in Japan and hurricanes and cold spells in North America. In addition, there were geopolitical issues such as trade friction as well as various human rights issues that occurred worldwide. It became a year carved in history as one that had a major impact on society and the lives of people.

On the other hand, it was also a year when digital transformation (DX) made progress in our daily lives and all kinds of industries, and the importance of semiconductors, which are essential for information and communication technologies (ICT), became prominent.

As the shift toward a data-driven society accelerates and efforts to solve global environmental problems progress, “Digital × Green” has become a major trend worldwide. Green refers to carbon neutrality, the goal of decarbonization by suppressing CO2 emissions. (Fig. A)

Therefore, the world is currently pushing firmly ahead with implementing ICT and DX as well as taking action to realize a carbon-free society in order to build a strong and resilient society in which economic activities do not stop under any circumstances.

Going forward, the digitalization of all kinds of industries will penetrate widely through society, including the evolution of new technologies such as autonomous driving and smart fabs, smart agriculture, smart medical care, and smart cities. Standing at their core and supporting them are semiconductors. Semiconductors were first used in computers and television sets and then spread to mobile phones. They are now no longer simply chips that power things but have instead become an infrastructure for the whole of society. It is only with semiconductors that the digitalization of society becomes possible.

The technological demands on semiconductors, such as larger capacity, higher speed, higher reliability, and lower power consumption, are limitless.

Alongside the evolution of semiconductors are displays that form the interface between people and data. Technological innovation continues to center on organic light-emitting diodes (OLEDs), and application is expanding beyond the concept of just being monitors. Technological innovation will continue as long as efforts to make displays more beautiful and easier to use continue. (Fig. B)

Fig. A: Trend toward the Future

Digital (ICT/DX) × Green (decarbonization)

Fig. B: Technological Demands on Semiconductors and Displays

Toward Expansion of Medium- to Long-term Profit and Continuous Corporate Value Enhancement

I would like to express my sincere gratitude to all stakeholders for your continued support and patronage.

Tokyo Electron was established in 1963 by a few young people full of venture spirit. That spirit has been passed down through the years, making it possible for us to launch innovative equipment for semiconductor and LCD panel manufacturing, areas characterized by rapid technological change.

With the spread of IoT, AI and 5G today, the shift toward a data-driven society is accelerating, and we expect to see further expansion in business opportunities against a backdrop that demands unending technological innovation.

Amid such circumstances, we constantly remain aware of the “Purpose” of our existence in society, as represented by our Corporate Philosophy: “We strive to contribute to the development of a dream-inspiring society through our leading-edge technologies and reliable service and support.” By leading the world in the creation of high-value-added technologies, we strive to expand profits in the medium to long-term, and continuously enhance our corporate value.

Fig. A: Trend toward the Future

Therefore, the world is currently pushing firmly ahead with implementing ICT and DX as well as taking action to realize a carbon-free society in order to build a strong and resilient society in which economic activities do not stop under any circumstances.

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Fig. B: Technological Demands on Semiconductors and Displays
Reflecting on the past, the 1990s were called computer-centric, with personal computers driving the semiconductor market. We then entered the mobile-centric 2000s, when smartphones drove the market. Going forward, we will enter the age of DX, where billions of “things” will be connected to the internet and the big data generated by these things will drive society. Global data traffic is expected to increase at a compounded annual growth rate of 26%.

The semiconductor market will expand greatly to support the explosive increase in data traffic. In the nearly 70 years since the invention of the transistor in 1947, the size of the global semiconductor market reached approximately US$440 billion in 2020. It is expected to reach US$1 trillion in 2030, more than twice the size of the current market which has grown over the past 70 years. In other words, it means a market that is the same size or greater than the current one will develop in the next 10 years. (Fig. C)

The wafer fab equipment (WFE) market that we are a part of is expected to have a market size of over US$90 billion in 2021.3 Looking toward the future, further growth is expected with the trends toward ICT, DX, decarbonization, electric vehicles, autonomous driving and post-5G communication, and just as the semiconductor market is expected to reach US$1 trillion, the WFE market will also enter what we refer to as a new “Big Years” growth phase. (Fig. D)

To achieve further growth, we will ride the wave of such technological innovation and create high-added-value technologies that the world has never seen and only we can accomplish. Applying our expertise as an equipment manufacturer developed through being an industry leader and using all management resources, including our employees who both create and fulfill company values, we will contribute toward achieving the societal shared value of balancing “Digital + Green”. We will strive to practice our Corporate Philosophy and achieve sustainable growth through these efforts and meet the expectations of all stakeholders.

1 A compounded annual growth rate of 26%: Omdia’s projection for 2020–2030
2 WFE: Wafer Fab Equipment. 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. Wafer fab equipment refers to the production equipment used in front-end production. Refer to Semiconductor Manufacturing Process and Our Main Products on p. 14
3 Market size for 2021 is our estimate as of August 16, 2021.

Medium-term Management Plan

In May 2019, we revised our Medium-term Management Plan upward. We developed a financial model that shows the relationship between operating margin and return on equity (ROE) that we should seek to achieve for each anticipated sales scope. The model’s core targets are to achieve net sales of 2 trillion yen, an operating margin of 30% or more and an ROE of 30% or more by fiscal 2024. It was designed to capture as much growth potential as possible while steadily reinforcing our financial strength and seeking to achieve world-class profits and ROE. (Fig. E)

Through these profits, we will achieve shareholder satisfaction and stable and enriching lives for our employees in all business situations. We will also strive to invest in technology development and secure outstanding human resources for continuous growth. In addition, we will seek financing when necessary under favorable conditions by building a solid financial foundation based on profits and fulfill our corporate responsibility by paying proper taxes.

For fiscal 2022, we forecast net sales to be 1,850 billion yen with a 27.5% operating margin1. We assess that we are making smooth progress toward our targets and will continue to work as one to achieve this financial model.

1 Net sales and operating margin for fiscal 2022 are estimates as of August 16, 2021.

Our Material Issues

We define our material issues as we strive for medium- to long-term profit expansion and continuous enhancement of corporate value. In addition to “Management Foundation”, with areas such as safety, quality, compliance, governance and risk management that support our business activities at the foundational level, our material issues consist of “Product Competitiveness”, “Customer Responsiveness” and “Higher Productivity”. As a manufacturer, we always keep in mind the pursuit of becoming “Only One, Number One” through sales and support of equipment with world-leading performance that fulfills extreme technological needs, that is to say, we offer the Best Products and Best Technical Service. We will quickly grasp the changes in the trends of and needs for leading-edge technologies to create next-generation products with overwhelming added value and performance required by customers in the future, be the sole strategic partner using our customer responsiveness, and further strengthen our earning power using higher productivity based on continually improving operational efficiency. (Fig. F)
Leveraging Expertise and Strengths

Based on these aforementioned ideas, we will adopt strategies that maximize the application of our expertise and strengths, which are as follows: (1) being the only manufacturer in the world with the series of four key process systems required for semiconductor scaling; (2) having the number one or two product share for these systems; (3) specifically, our 100% share of coater/developers for EUV lithography, which is essential for leading-edge scaling; and (4) delivering approximately 4,000 units annually and having a cumulative number of equipment installations of approximately 76,000 units, the largest number in the industry, through which sold equipment become new business opportunities and build a business model for field solutions that generate value. (Fig G)

Under such circumstances, we plan to invest 165 billion yen for research and development in fiscal 2022, the highest amount ever. When we revised the aforementioned Medium-term Management Plan, we announced a research and development investment plan of approximately 400 billion yen in the three years starting from fiscal 2020. We are executing investments according to this plan. Going forward, we will continue to proactively invest in growth using our solid financial foundation based on profits.

Virtually every semiconductor or display in the world passes through our systems. We will further grow our strengths and bring in growth opportunities to the utmost extent possible.

Sustainability Initiatives

Our sustainability initiatives are the practice of our Corporate Philosophy itself. We will achieve sustainable growth and the enhancement of corporate value by using our unique expertise as an equipment manufacturer and contributing to the development of industry and society.

The Environment

Based on this approach, we are undertaking the building of a carbon-free society from three perspectives.

First, we will contribute toward higher performance and lower power consumption for semiconductor devices being used around the world. We will create the societal shared value of balancing "Digital + Green" by promoting technological innovation together with our customers.

Next is savings energy during the operation of equipment. In December of last year, we revised our Medium-term Environmental Goals for 2030, announcing our goal of reducing per-wafer CO₂ emissions by 30% compared to 2018.

The third perspective is the activities at our plants and offices. We have set our goals to achieve a rate of 100% renewable energy usage and a 70% reduction in total CO₂ emissions compared to 2030 (Fig. H).

We will fulfill our mission and responsibility toward achieving decarbonization based on industry-leading, top-class goals.

We established E-COMPASS (Environmental Co-Creation by Material, Process and Subcomponent Solutions) in June of this year as a new supply chain sustainability initiative. We will actively endeavor to preserve the global environment throughout the supply chain. (Fig. I)

Human Resources

We believe corporate growth is about people, and employees both create and fulfill company values. Based on this approach, we place importance on the following three perspectives.

The first perspective is from the corporate culture and codes of conduct that we have cherished since our founding, and we summarized them as TEL Values. We always keep in mind the TEL Values as we strive to create a company replete with dreams and vitality.

The second perspective is from management that emphasizes motivation. "Employee capabilities and motivation" is essential for the Company’s growth, and we focus on improving employee motivation together with the strengthening of human resource development such as through TEL UNIVERSITY. We see the main components of employee motivation as (1) dreams and expectations of the Company’s future, (2) opportunities to take on challenges, (3) fair evaluations that recognize employee effort, and (4) an open workplace. Based on these components, we introduced a new human resources system in July of 2017 to promote the improvement of communication between managers and their subordinates. In addition, the Corporate Senior Staff (CSS), consisting of our executive officers and management executives of overseas subsidiaries, reviews the progress of the entire Group’s overall growth strategy and additional measures every quarter to improve openness and mobility within our organization. I also personally communicate the Company’s direction at employee meetings being held at each location and listen to on-site opinions and proposals from employees directly in an effort to make prompt and accurate management decisions.

The third perspective is from human resource diversity. With 76 locations in 18 countries and regions around the world, 42% of our employees are foreign nationals. We actively implement initiatives for global diversity, including appointing the presidents and management executives of overseas subsidiaries mainly from locally recruited employees. In addition, we are also undertaking further gender-related initiatives to promote diversity and inclusion to bring about further growth.

1 Refer to TEL Values on p. 12
2 TEL UNIVERSITY: An in-house educational establishment, helping employees to independently build their careers and realize their personal goals.
Corporate Governance
As for corporate governance, we seek to build a highly effective framework that achieves sustainable growth while taking into consideration our corporate culture and business characteristics for the proper functioning of management’s decision-making and supervisory role. We have introduced a skills matrix in this fiscal year and will encourage diversity in the members of our Board of Directors and promote further improvement to deliberations. In addition, to further strengthen compliance and risk management, we have defined 13 business-related and other risks across our value chain and are working to strengthen our framework to be capable of always going through the PDCA cycle.

We will build governance that is both proactive and prudent to incorporate our growth potential to the maximum extent.

To Be a Company that Is Loved and Trusted by All Stakeholders
A rich future that will be realized by semiconductors, and semiconductors which continue to evolve, the market for production equipment which support these has entered a further growth phase.

Corporate growth is about people, and employees both create and fulfill company values. Utilizing our expertise as an equipment manufacturer and diverse management resources, we will provide society with high-value-added technologies that the world has never seen and only we can accomplish.

Going forward, we will continue to take on challenges and evolve to be a truly excellent global company that is loved and highly trusted by all stakeholders.

We look forward to your continued support and patronage.

Toshiba Kawai
Representative Director, President & CEO

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Please also refer to Chapter 4 “Achieving Greater Growth”

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TEL Values
Based on the thinking that corporate growth is about people and that employees both create and fulfill company values, we looked back at the values accumulated since our founding and what it means to be our company and summarized the codes of conduct that we hope to honor in the future as the TEL Values.

We will start our 60th fiscal year in April of next year. To further grow and keep being a company replete with dreams and vitality in the future, we will open up a new era together with the TEL Values as our foundation.

Pride
We take pride in providing high-value products and services.
We offer our customers cutting-edge technological products, along with the highest level of quality and technical service, in the pursuit of total customer satisfaction. We consider profit to be an important measure of value in our products and services.

Ownership
We will keep ownership in mind as we think things through, and engage in thorough implementation in order to achieve our goals.
We always have an awareness of problems and tackle challenges with enthusiasm and a sense of responsibility. We make decisions quickly and do what we consider to be the best course of action.

Teamwork
We respect each other’s individuality and we place a high priority on teamwork.
We create a workplace with an open atmosphere and positive communication. We establish relationships of trust with our business partners in order to facilitate mutual growth.

Challenge
We accept the challenge of going beyond what others are doing in pursuing our goal of becoming number one globally.
We view changes as opportunities and respond to them flexibly and positively. We are tolerant of failure and consider it important to learn from the process and results.

Awareness
We must have awareness and accept responsibility for our behavior as respectful members of society.
We strictly comply with laws and regulations and the rules of society.
We give top priority to safety, health and the global environment.
We strive to become a company that local communities hold in high esteem.

We have established the TEL Values, and we will continue to develop them accordingly in the future.

Semiconductors = Future
Creating technologies that the world has never seen
Continuing to take on challenges and evolve

Growth opportunity

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Company Overview

Tokyo Electron operates worldwide as a leading company in semiconductor and flat panel display (FPD) production equipment. By providing the Best Products and Best Technical Service, we are aiming for medium- to long-term profit expansion and continuous corporate value enhancement. We are also practicing our Corporate Philosophy by contributing to developing a sustainable society through our business.

Number of Sites (As of March 31, 2021)

- Head office: 1
- Branch, Office: 9
- Branch, Office (including Field Service): 13
- Sales Office: 14
- Branch, Office: 16

Japan: 7 companies at 26 sites
Overseas: 21 companies at 50 sites in 17 countries and regions
Worldwide total: 28 companies at 76 sites in 18 countries and regions (consolidated)

History

1960s
- Founded as technical specialized trading company

1970s
- Introduced the first full-scale manufacturer

1980s
- 1980: Landed on the Second Section of the Tokyo Stock Exchange

1990s
- 1996: Listed on the First Section of the Tokyo Stock Exchange
- 1999: Enhanced the group structure by establishing individual manufacturing companies

2000s
- 2007: Established "TEL University" to strengthen human resource development

2010s
- 2014: Established "TEL Values" formulated by the new CEO

2020s~
- 2020: Formulated and new Medium-term Management Plan to reflect the 8th Tokyo Electron Management Plan (Corporate logo created)

Sales by Region (Consolidated)

- Asia: 52.4 (3.7%)
- Europe: 63.5 (4.5%)
- North America: 152.0 (10.3%)
- Japan: 197.5 (14.1%)
- Taiwan: 249.7 (17.9%)

Number of Employees by Region (Consolidated)

- Japan: 3,846 (26.6%)
- Mainland China: 14,479 (39.0%)
- Southeast Asia, and Others: 8,296 (23.7%)
- Overseas: 3,128 (9.0%)

Semiconductor Manufacturing Process and Our Main Products

FPD Coater/Developer
- Single Wafer Deposition

Silicon dioxide film
Silicon nitride film

FPD Coater/Developer
- Single Wafer Deposition

Screen Printing System for Manufacturing OLED display Panel

Contact Formation
- Photolithography

Exposure
- Etching

Development
- Contact Formation

Test
- Package Inspection

Packaging Inspection
- Completed Integrated Circuit

FPD Production Equipment

Fused Silica
- Fused Silica

Sheet Glass
- Glass Sheet

Discharge Tube
- Discharge Tube

Liquid Crystal
- Liquid Crystal

Lithography
- Lithography

Exposure
- Etching

Development
- Contact Formation

Test
- Package Inspection

Packaging Inspection
- Completed Integrated Circuit

FPD Coater/Developer
- Fused Silica

Sheet Glass
- Glass Sheet

Discharge Tube
- Discharge Tube

Liquid Crystal
- Liquid Crystal

Contact Formation
- Photolithography

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### Characteristics of Production Equipment Business

As technological innovations drive the growth of the production equipment market, it is essential to provide leading-edge technologies and services.

#### Pursuit of Technological Innovations

As the spread of IoT, AI and 5G accelerates the transition to a data-driven society, the role played by semiconductors is becoming ever more important. The big data era will require large quantities of diverse semiconductors as well as even higher performance. There is no stopping technological innovation in semiconductors, including larger capacity, higher speed, improved reliability and lower power consumption. Meanwhile, the application scope for displays, which form the interface between people and data, is expected to expand thanks to higher resolution, lower power consumption, larger size and improved design freedom from taking advantage of flexible shapes. As long as technological innovations continue, the semiconductor and flat panel display (FPD) markets will keep growing. At the same time, the market for production equipment, which supports these devices, can also be expected to grow further.

#### Requirements of Production Equipment Manufacturers

Along with evolutions in semiconductors and FPDs, new materials and more complex structures are being adopted, resulting in an increasing degree of technical challenges in their production. As many as dozens of billions of transistors are integrated into leading-edge semiconductor chips, which are produced through more than 1,000 processing steps fully utilizing nanofabrication technologies. Consequently, the technical requirements for semiconductor and FPD production equipment are becoming more and more advanced. For production equipment manufacturers, it is extremely important to develop highest-performance equipment that helps realize semiconductor and FPD technological innovations by fully utilizing specialized expertise in a variety of fields, including electronics, mechanics, process and software. Therefore, it is crucial that manufacturers comprehend customer needs early, based on a solid relationship of mutual trust with customers, and carry out research and development continuously not only in-house but also with customers and consortiums. In addition, to carry out research and development that span multiple generations with an eye toward the future, solid management and financial foundations are also essential. Furthermore, the importance of technical services that support stable equipment operation is continuing to increase, and the utilization of AI and other technologies is actively being promoted toward providing higher-value-added services.

In our business activities, it is also crucial to build a sustainable supply chain based on partnerships with a variety of suppliers, including those who supply parts and materials, assemble and adjust equipment, and perform customs clearance and logistics operations. Moreover, as a “Digital × Green” society is being promoted, the demand for reducing environmental impact is also heightening. Toward the realization of a sustainable society, production equipment manufacturers are required to contribute to the preservation of the global environment through various steps, such as contributing to the development of low-power-consumption semiconductors and FPDs, increasing the productivity of their production equipment and improving the operational efficiency of their plants and offices.