Cover Image

"Technology Enabling Life" is our corporate message that expresses the Corporate Principles which consist of our Corporate Philosophy, Management Policies, Vision and TEL Values. By providing the Best Products and Best Technical Service, we contribute to the technological innovation in semiconductors and demonstrate the actualization of a dream-inspiring society.

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Technology
Enabling
Life

TOKYO ELECTRON

INTEGRATED REPORT 2024

Editorial Policy

Issuance of an Integrated Report

Tokyo Electron issues an integrated report for the purpose of reporting our medium- to long-term profit expansion and continuous corporate value enhancement to our stakeholders. In addition to the CEO's message, the 2024 report details progress in the Medium-term Management Plan, the re-identification of material issues as well as the deployment of the value chain in our business activities anchored around those material issues. We remain committed to accurately comprehending all of our stakeholders' demands and disclosing information timely and transparently.

Scope

This report and related data cover the entire Tokyo Electron Group (26 consolidated companies), with the exception of some domestic (Japan-exclusive) content.

Reference Guidelines

- IFRS Foundation: Integrated Reporting Framework, IFRS S1 and S2, SASB Standards
- Ministry of Economy, Trade and Industry: Guidance for Integrated Corporate Disclosure and Company-Investor Dialogues for Collaborative Value Creation
- Global Reporting Initiative (GRI): GRI Standards
- Ministry of the Environment, Government of Japan: Environmental Reporting Guideline 2018
- Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD)

Issued Date

September 2024

Period Covered

Fiscal 2024 (April 1, 2023 to March 31, 2024), some content also covers fiscal 2025

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Main Company-related Information Disclosures

- Integrated Report
  www.tel.com/ir/library/ar/
- Consolidated Financial Statements
  www.tel.com/ir/library/consolidated-financial-statements/
- FACT BOOK
  www.tel.com/ir/library/fb/
- Medium-term Management Plan
  www.tel.com/ir/policy/mplan/
- Sustainability Website
  www.tel.com/sustainability/index.html
- Corporate Governance Guidelines and Report
  www.tel.com/about/cg/index.html
- Corporate Profile
  www.tel.com/files/about/library/pv8va20000001ffv-att/corporate_guide_e.pdf

Tokyo Electron's Logo

Tokyo Electron's logo was created as a symbol for our next stage of growth, based on our Corporate Philosophy and Vision in 2015. This simple design represents our reliability and the engaging presence we bring to a competitive industry. The green square at the center of the logo signifies the core of innovation supporting development in the industry; the translucent blue expresses our leading-edge advanced technology. We strive to contribute to the development of a dream-inspiring society through our leading-edge technologies and reliable service and support.

Contents

CEO's Message

To build a strong and resilient society in which economic activities do not stop under any circumstances, we will contribute to balancing the digitalization and preservation of the global environment through technological innovation in semiconductors.

Toshiki Kawai
Representative Director,
President & CEO

Toward Further Growth Based on Trust and Reliability

I would like to start by thanking all our stakeholders for their constant support. On November 11, 2023, Tokyo Electron celebrated 60 years since its founding in 1963. From that time, we have been able to contribute to the development of the semiconductor industry, and achieve the level of growth that we have, entirely thanks to this support from our stakeholders. Prioritizing the building of trust and reliability, we aim to practice our Corporate Philosophy of "We strive to contribute to the development of a dream-inspiring society through our leading-edge technologies and reliable service and support," endeavoring to expand medium- to long-term profit and to continuously enhance our corporate value.

The birth of the transistor in 1947 led to the development of personal computers, mobile phones and other electronic devices, and to the internet and IT platform services. Over recent years, it has also led to a transition toward a full-fledged data-driven society. Going forward, it is expected that applications requiring large-scale computing, such as AI, autonomous driving and virtual reality, will become technology drivers and that further market growth will continue. And it is technological innovation in semiconductors that will support these trends.

Under such circumstances, the semiconductor market is forecast to reach US$1 trillion by 2030. This means that a market that has grown to US$530 billion over 76 years will roughly double in size in just 6–7 years. On the other hand, using many different applications will require higher data processing capabilities, and therefore will increase power consumption, so there is concern about the impact on preservation of the global environment. For this reason, innovative technologies are needed to not only achieve higher speeds, larger capacity and superior reliability in semiconductors, but lower power consumption as well.

With semiconductor market growth, about 100 new semiconductor fabs are predicted to start operating globally in the years from 2022 to 2026, so the semiconductor production equipment market in which we operate will also expand further.

Continuous Enhancement of Corporate Value through A Double-offensive Management Style

Vision Realization and the Medium-term Management Plan

Digitalization and decarbonization for preservation of the global environment, to build a strong and resilient society in which economic activities do not stop under any circumstances, are becoming global trends. To help realize balancing the digitalization and preservation of the global environment, we are leveraging our expertise as a semiconductor production equipment manufacturer, and promoting technological innovation in semiconductors. And for this purpose, we formulated our Vision of becoming "A company filled with dreams and vitality that contributes to technological innovation in semiconductors." This Vision is based on the Creating Shared Value (CSV) concept of utilizing our unique resources and expertise to solve social issues. We have defined our own CSV as TEL's Shared Value (TSV), through which we strive to create social and economic value in our business activities.

As we implement TSV, we have set fiscal 2027 financial targets in our Medium-term Management Plan of an operating margin of 35% or more and ROE of 30% or more, with net sales of 3 trillion yen or more. We consider profit to be an important measure of value in our products and services, and we aim to achieve a world-class operating margin and ROE by providing the Best Products with innovative technology, and the Best Technical Service with high added value.

Our pursuit of this aim is a more aggressive style of management. At the same time, though, we are focusing on Safety, Quality, Compliance and other essentials for continuous growth of the Company. Our efforts on these areas may appear at first glance to be defensive in nature; however, we believe that more proactive action will help our company become stronger, or more aggressive. By promoting such a double-offensive management style, and ensuring short-, medium- to long-term profit expansion and continuous corporate value enhancement, which are also part of my mission as CEO, we aim to become a truly excellent global company.

Business Activities Anchored around Material Issues

As part of efforts to achieve our Medium-term Management Plan, we identify key items to be worked on with priority in our businesses as material issues. In fiscal 2024, we looked at our previous material issues of Product Competitiveness, Customer Responsiveness, Higher Productivity, and Management Foundation, and developed a more granular level of material issues with respect to their significance to the Company and to society.

Initiatives for Further Growth

We consider the following to be our strengths: (1) being the world's only manufacturer with products in deposition, coater/developer, etch and cleaning, the four sequential key processes necessary for semiconductor scaling, (2) a 100% share in coater/developer for EUV lithography, which are necessary for semiconductor evolution, (3) our product lines being strongly positioned in their respective segments, all of which having achieved first or second place in market share, (4) technical service and marketing developed based on relationships of absolute trust with customers, built through the highest number of installations in the world (approximately 92,000 units) and (5) more than 23,000 patents owned, the largest number in the industry globally.

Leveraging these strengths, we plan to spend 1.5 trillion yen or more on R&D investment and 700 billion yen or more on capital investment over five years from fiscal 2025 to accomplish our Medium-term Management Plan and achieve further growth thereafter.

What is vital for us is timely and continuous creation of next-generation products that are both "only one" and "number one." We will work to provide high-value-added equipment with world-leading performance through not only our own R&D activities, but through collaborations with customers and consortiums as well, and we will ensure the outcomes of this R&D leads efficiently to increased profits.

As we expand the scale of our business, it is also important that we improve production efficiency. By implementing digital transformation, we will actively promote standardization and leveling of tasks in a range of operations, and adopt Smart Manufacturing at our manufacturing sites.

Reducing Environmental Impact and Achieving Net Zero Emissions through E-COMPASS

With preservation of the global environment growing in importance in society, we are conducting a range of activities through our environment-focused E-COMPASS initiative. Specifically, we are working with our customers and partner companies to achieve technological innovation in semiconductors, and reduce their environmental impact throughout the entire supply chain, from the following three perspectives.

- Pursuing higher performance and lower power consumption in semiconductors
- Achieving both high process and environmental performance
- Reduction of CO_2 and equivalent emissions in all business activities

While our original long-term environmental goal was to achieve net zero by 2050, during implementation of these initiatives, in December 2023, we brought that date forward to 2040 as we continue working to reduce our greenhouse gas emissions.

Practicing Motivation-oriented Management

Based on our belief that "our corporate growth is enabled by people, and our employees both create and fulfill company values," we conduct management focused on employee motivation so they can fully exercise their capabilities, centered on the following five points.

The Five Points and Main Activities for Motivation-oriented Management

1. **Awareness that our company and work contributes to the development of industry and society**
   - Realization of our Vision based on TSV
2. **Dreams and expectations of the Company's future**
   - To achieve net sales of 3 trillion yen or more, an operating margin of 35% or more, and ROE of 30% or more
3. **Opportunities to take on challenges**
   - 1.5 trillion yen or more in R&D investment over five years
4. **Fair evaluations that recognize employee efforts and globally competitive rewards**
   - Performance-linked compensation
5. **Workplace with an open atmosphere and positive communication**
   - Convening employee meetings and round-table discussions with employees globally

In addition, we are working to secure a diverse workforce in line with our "ONE TEL, DIFFERENT TOGETHER™" slogan focusing mainly on 3G (Global, Gender, Generation), while also improving work-life balance, implementing measures aimed at creating career paths for employees and enhancing educational programs.

Focusing on Sustainable Industry Development

As a leading company in semiconductor production equipment, we are actively engaged in supply chain management, not just within the Company, and in the education of students, researchers and others who will be responsible for the future of the industry, which we consider to be our mission. We will therefore contribute to the sustainable development of industry in a number of ways. For the supply chain, we will further enhance the E-COMPASS initiative that I described earlier, and to strengthen human resource development, we will promote a program of industry-academia-government collaboration, which includes collaboration with universities in Japan and abroad.

Aiming to Become a Company That Is Cherished and Trusted by All Stakeholders

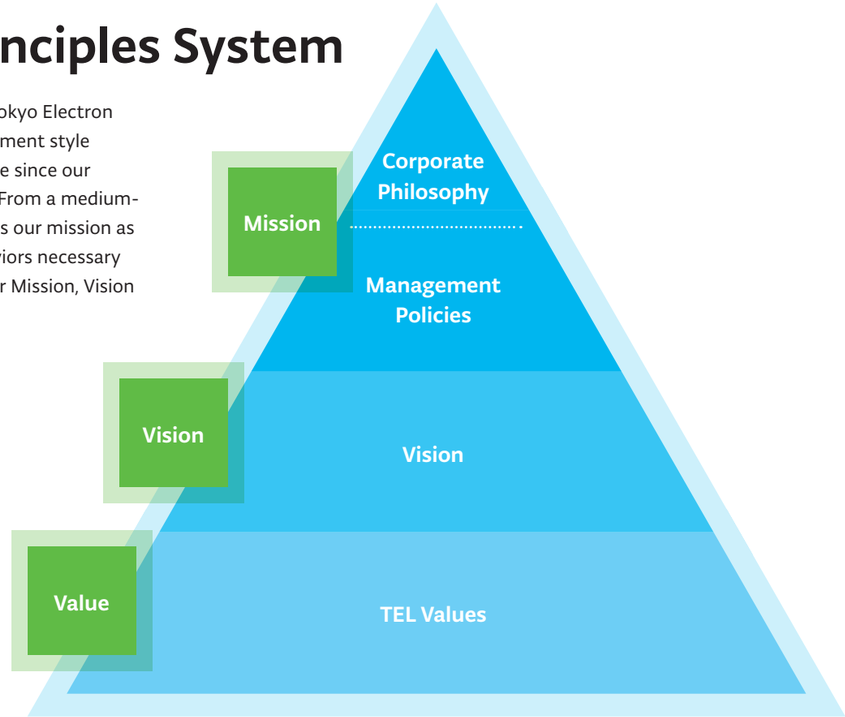
We have now entered a new growth phase in terms of a prosperous future made possible by semiconductors, their ongoing evolution, and the semiconductor production equipment market that supports them. To achieve our goal of becoming number one globally, we will continue to take on challenges and evolve, create high-value-added technologies that the world has never seen and only we can, and provide them to society. We will also strive to become a company that is cherished and deeply trusted by all stakeholders, and that continues to be a company filled with dreams and vitality.

We look forward to your continued support and patronage.

Representative Director,
President & CEO

Corporate Principles System

The Corporate Principles system at Tokyo Electron summarizes the basis of our management style throughout our growth from the time since our founding in 1963 to the present day. From a medium- to long-term perspective, it expresses our mission as a company and the values and behaviors necessary to fulfill our goals, and consists of our Mission, Vision and Value.



Mission

Corporate Philosophy

The purpose of our existence and mission in society

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 logic that underscores 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.

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

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

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.

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.

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

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.

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.

Vision

Vision

Medium- to long-term business aspirations based on our Corporate Philosophy and Management Policies

A company filled with dreams and vitality that contributes to technological innovation in semiconductors

Tokyo Electron pursues technological innovation in semiconductors that supports the sustainable development of the world.

We aim for medium- to long-term profit expansion and continuous corporate value enhancement by utilizing our expertise to continuously create high value-added leading-edge equipment and technical services.

Our corporate growth is enabled by people, and our employees both create and fulfill company values. We work to realize this Vision through engagement with our stakeholders.

Value

TEL Values

Attitudes, codes of conduct, and values to be observed by each employee

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.

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.

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.

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.

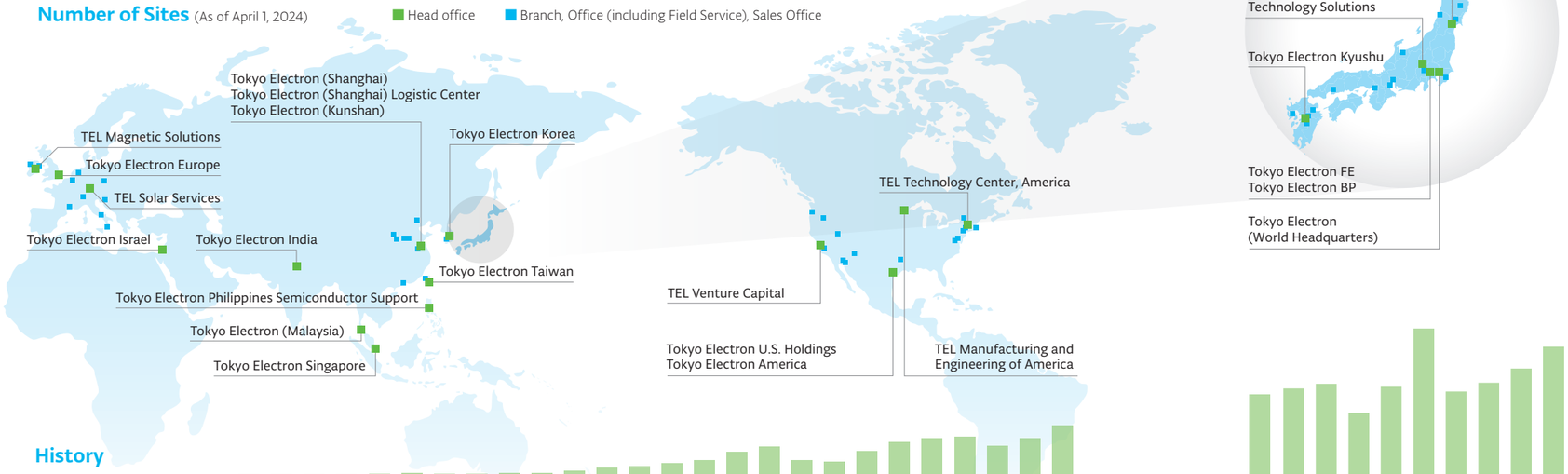
We have established the TEL Values as a foundation for our operations, and we will continue to develop them accordingly in the future.

Company Overview

Tokyo Electron operates worldwide as a leading company in semiconductor production equipment industry. By providing the Best Products, 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 the development of a sustainable society through our business.

Number of Sites (As of April 1, 2024)

Head office / Branch, Office (including Field Service), Sales Office



Japan:
6 companies at **27** sites

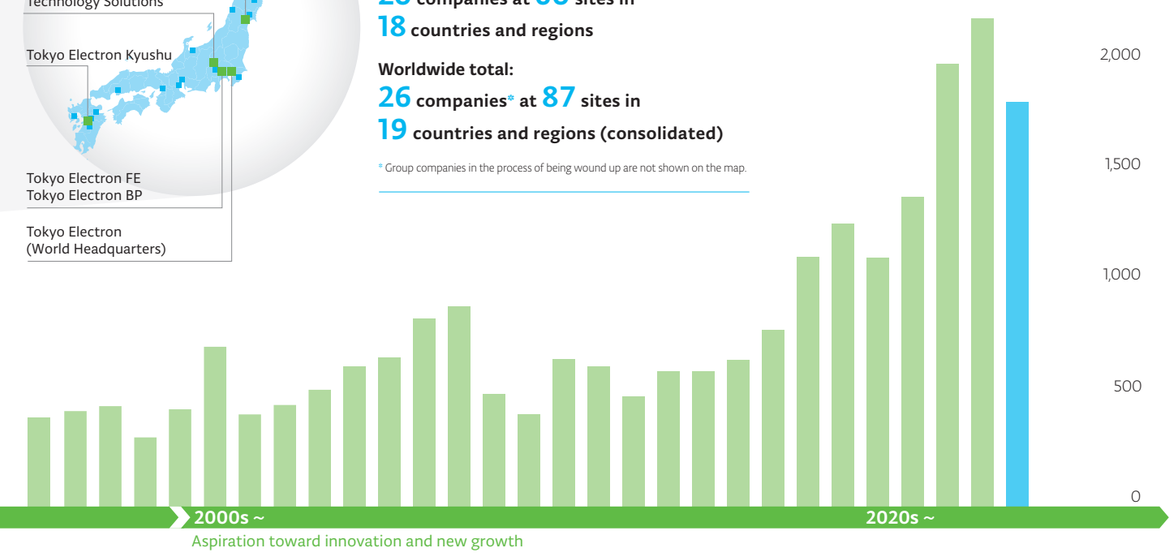
Overseas:
20 companies at **60** sites in **18** countries and regions

Worldwide total:
26 companies* at **87** sites in **19** countries and regions (consolidated)

* Group companies in the process of being wound up are not shown on the map.

Sales

Fiscal 2024
1,830.5 billion yen



History

1960s ~ Founded as technical specialized trading company

1963
Tokyo Electron Laboratories, Inc. is established with capital from Tokyo Broadcasting System, Inc.

1964
Tokyo Electron Laboratories acquires importing and selling rights for diffusion furnace manufactured by Thermco Products Corp. (U.S.) and begins sales

1968
TEL-Thermco Engineering Co., Ltd. began domestic production of diffusion furnaces

1980s ~ Shifting to a full-scale manufacturer

1978
Tokyo Electron Laboratories, Inc. renamed Tokyo Electron Ltd.

1980
Listed on the Second Section of the Tokyo Stock Exchange

1984
Listed on the First Section of the Tokyo Stock Exchange

1986
Export of semiconductor production equipment begins

1990s ~ Accelerating globalization

1990s
Enhanced the Group structure in Japan by, for example, establishing service and manufacturing companies, and set up overseas subsidiaries throughout the world to globalize operations

1990
Tokyo Electron (TEL) marks a major move into development and marketing of FPD production equipment

1994
Started direct sales and support systems overseas

1999
Category of industry on the Tokyo Stock Exchange First Section changed from "Wholesale Trade" to "Electric Appliances"

2000s ~ Aspiration toward innovation and new growth

2006
"TEL Values" formulated as code of conduct

2007
Established "TEL UNIVERSITY" to strengthen human resource development

2015
Establishment of Tokyo Electron Corporate Governance Guidelines

Re-emergence as the New TEL (Vision, Medium-term Management Plan formulated and new Corporate Logo created)

2019
Formulation of the Medium-term Management Plan to further enhance corporate value

2020s ~

2021
Began publishing integrated reports

2022
Listed on the Prime Market of the Tokyo Stock Exchange

Formulated the new Vision and Medium-term Management Plan

"Technology Enabling Life" formulated as corporate message

JPX PRIME TOKYO

Technology Enabling Life

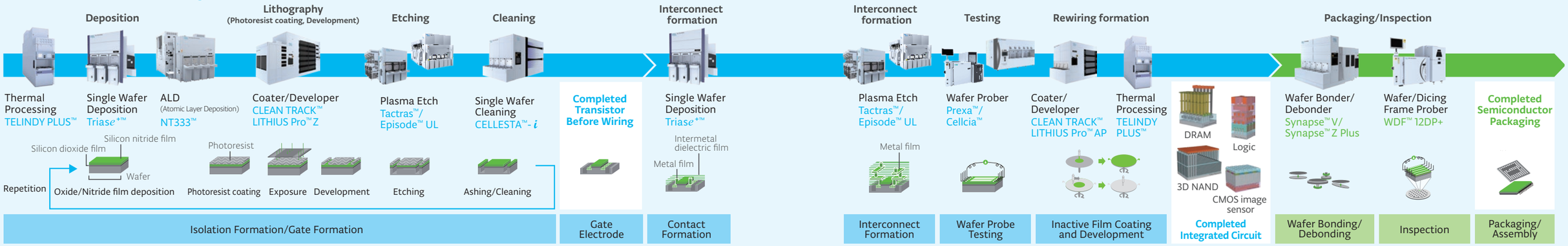
2023
60th anniversary of the foundation

Transition of Typical Applications of Semiconductors

Mainframe Computer — Single Chip Microprocessor — Personal Computer — Mobile Phone — Digital Consumer Electronics — Big Data

Semiconductor Manufacturing Process and Our Main Products

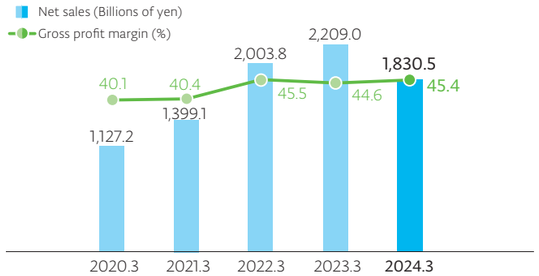
Wafer Process (Front-end) / Assembly and Test Process (Back-end)



Highlights of Key Indicators for Continuous Corporate Value Enhancement

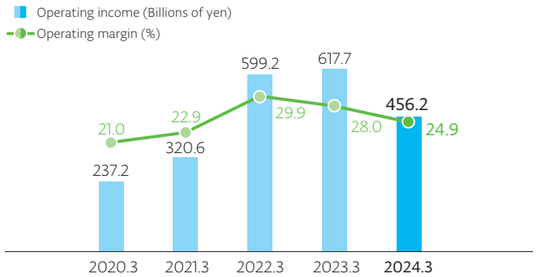
At Tokyo Electron, policy decisions and various judgments are made for our business activities by clarifying management indicators, which are important for medium- to long-term profit expansion and continuous corporate value enhancement, as well as conducting monitoring and analysis.

Net Sales and Gross Profit Margin



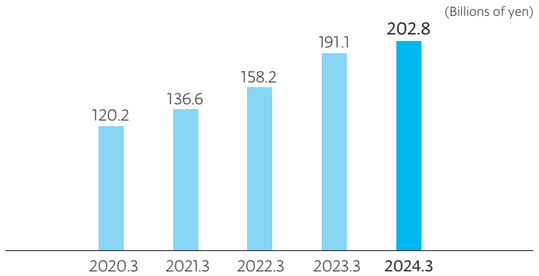
Net sales decreased due to adjustments to capital investments by customers, but gross profit margin stayed at a record high level, owing to an increase in sales of products with high-profit margins.

Operating Income and Operating Margin



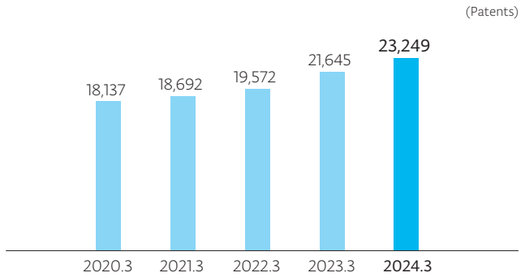
Operating income and operating margin decreased because of continued investments in R&D for the future despite the market being in a period of adjustment.

R&D Expenses



We made an R&D investment of 202.8 billion yen in fiscal 2024, making steady progress toward achieving the target of 1 trillion yen set out in the Medium-term Management Plan. As further growth investments, we plan to invest over 1.5 trillion yen in R&D over the five years from fiscal 2025.

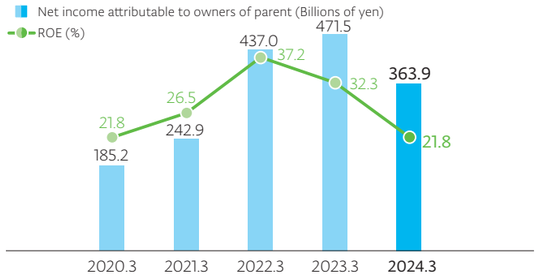
Patents Owned[6]



In terms of number of patents owned, we have remained No. 1 in the semiconductor production equipment industry for the consecutive year with 23,249 patents owned as of the end of March 2024. We built a competitive intellectual property portfolio in terms of both quantity and quality, maintaining a competitive advantage in the intellectual property field on a global level.

6 Figures for fiscal 2020 to fiscal 2022 are based on our database; figures for fiscal 2023 to fiscal 2024 are based on LexisNexis® PatentSight® database.

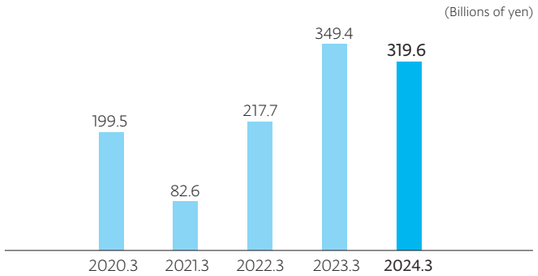
Net Income Attributable to Owners of Parent and ROE[1]



ROE decreased because of lower net income attributable to owners of parent due to the decreased operating income, and the growth in total equity.

1 ROE = Net income attributable to owners of parent/Average total equity × 100

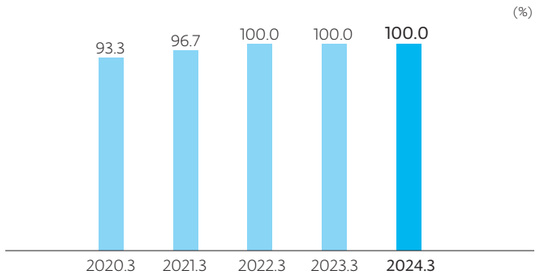
Free Cash Flow[2]



Free cash flow decreased from the previous fiscal year as a result of decreased net income attributable to owners of parent and increased capital investments to respond to future market growth, despite smooth collection of sales receivables.

2 Free cash flow = Cash flows from operating activities + Cash flows from investing activities (excluding changes in time deposits and short-term investments)

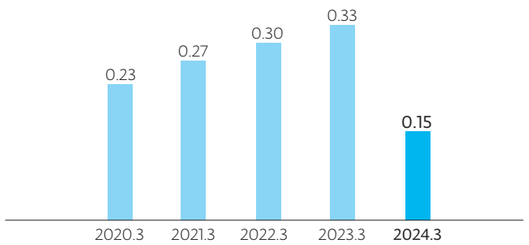
Percentage of Respondents who Selected "Very Satisfied" or "Satisfied" in the Customer Satisfaction Survey[7]



The percentage of respondents who gave evaluations of "Very Satisfied" or "Satisfied" reached 100% in fiscal 2024 continuing from the previous year. Aiming to be the sole strategic partner for our customers, we strive to further improve customer satisfaction, a key theme since our founding.

7 For each question, average score is calculated for all customers who responded.

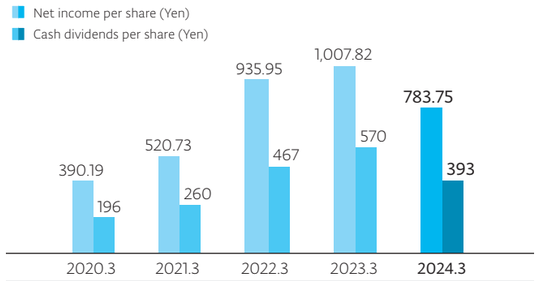
Workplace Incidents per 200,000 Work Hours (TCIR[8])



In fiscal 2024, through enhancement of safety training and continuous efforts toward safe design of equipment, we achieved a TCIR of 0.15, an industry-leading position in the semiconductor production equipment industry. With "Safety First" as our slogan, we are pushing ahead with various activities towards achieving the target in our Medium-term Management Plan of no more than 0.10.

8 TCIR: Total Case Incident Rate

Net Income per Share and Cash Dividends per Share[3, 4]

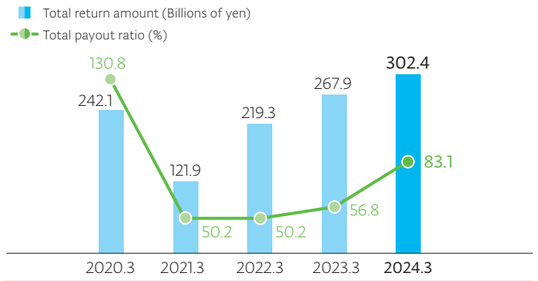


Net income per share and cash dividends per share decreased due to the decrease in net income attributable to owners of parent.

3 These figures reflect the stock split.

4 Dividend payout ratio: 50%. However, the amount of annual dividend per share shall not be less than 50 yen, and we will review our dividend policy if we do not generate net income for two consecutive fiscal years.

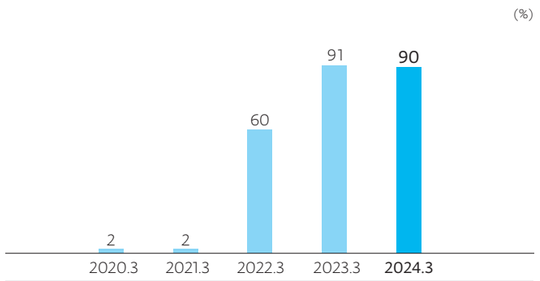
Total Return Amount and Total Payout Ratio



Total return amount grew year-on-year owing to repurchases of treasury stocks[5], despite the decrease in dividends paid.

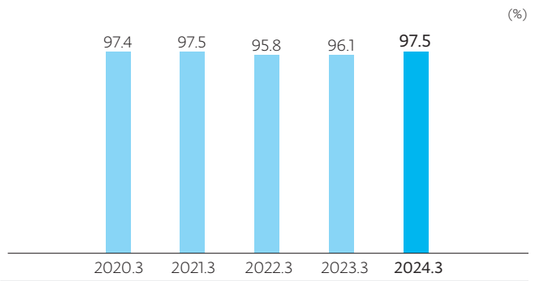
5 Repurchases of treasury stocks: We will consider executing these flexibly.

Renewable Energy Usage at Plants and Offices



Our renewable energy usage reached 90% on a global basis as of fiscal 2024 (100% for Japan). Initiatives are now underway to achieve our new target of reducing total CO_2 emissions from our plants and offices by 85% (compared to fiscal 2019) by fiscal 2031, such as promoting the introduction of renewable energy to regions where it has not yet been introduced.

Employee Retention Rates[9]



Our employee retention rate stayed high at 97.5% on a global basis in fiscal 2024. Recognizing that our employees both create and fulfill company values, we continued to effectively develop initiatives aimed at further improving employee engagement.

9 Calculated using data on turnover rate

Characteristics of Semiconductor Production Equipment Business

The role of semiconductors is becoming increasingly important as the spread of AI and IoT accelerates the transition to a data-driven society. With the continuous expansion of digital technology usage and the advancement of semiconductor technological innovation, the importance of semiconductor production equipment increases even further.

It is vital for semiconductor production equipment manufacturers to utilize specialized expertise in a variety of fields and develop equipment with the highest performance to continuously expand business. This requires comprehending the needs of customers early on based on a solid relationship of mutual trust and engaging in R&D from a medium- to long-term perspective. In addition, we must collaborate with consortiums engaged in creating leading-edge technologies and carry out R&D at a global level. Capital investment and a solid management and financial foundation is essential to perform these activities consistently and effectively.

Providing high-value-added technical services that support the stable operation of equipment is also important. To achieve this, there has been a proactive push toward digital transformation (DX), such as the use of AI.

In addition to these aspects, it is crucial to build a sustainable supply chain based on partnerships with various suppliers involved in parts and materials supply, equipment assembly and adjustment, customs clearance, logistics and the like. Furthermore, contribution to the development of semiconductors with higher performance and lower power consumption, higher productivity of production equipment and reduced environmental impact are also being asked of semiconductor production equipment manufacturers.

Technological innovations in semiconductors driving the growth of the production equipment market

The Driving Forces of Growth and Strengths behind Our Company

From its founding, we have treasured the trust and reliability of our stakeholders, which serves as the foundation for our unique business model. We have also developed three key driving forces of growth: "abundant technological capabilities cultivated as an industry leader," "absolute trust from customers based on our reliable technical services" and "challenging spirit of our employees, who are capable of flexibly and rapidly adapting to changes in the environment." By maximizing the strengths created by these driving forces in our business activities, we aim for further growth and strive for medium- to long-term profit expansion and continuous corporate value enhancement.

The Driving Forces of Growth behind Our Company

Driving Force 1
Abundant technological capabilities cultivated as an industry leader
We generate innovative and diverse technologies through in-house development and joint development with our customers and collaboration with world-leading consortiums through proactive investment in R&D

Driving Force 2
Absolute trust from customers based on our reliable technical services
Striving to further improve customer satisfaction by providing high quality and highly efficient service, we will be the sole strategic partner for our customers

Driving Force 3
Challenging spirit of our employees, who are capable of flexibly and rapidly adapting to changes in the environment
Based on the idea that "our corporate growth is enabled by people, and our employees both create and fulfill company values," we promote management that emphasizes employee motivation, and realize a company filled with dreams and vitality

Strengths

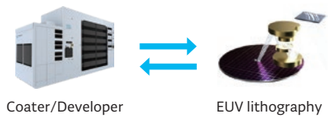
Only one

The world's only manufacturer with products for the four sequential key processes necessary for semiconductor scaling: deposition, coater/developer, etch and cleaning

100%

100% share in coater/developer for EUV[1] lithography, which are necessary for semiconductor evolution

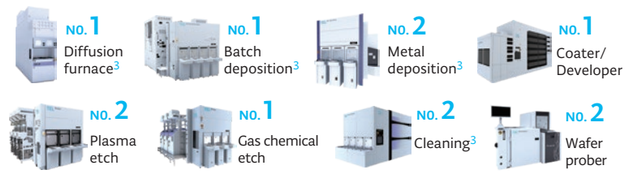
1 EUV: Extreme Ultraviolet. A semiconductor industry term for an exposure technology that uses a specific wavelength of 13.5 nm.



No.1 /No.2

Our product lines are strongly positioned in their respective segments, all of which having achieved first or second place in market share[2]

2 Our estimate (2023)
3 Our product lines in respective segments: Diffusion furnace includes thermal processing, batch deposition includes ALD (Atomic Layer Deposition) and CVD (Chemical Vapor Deposition), metal deposition includes single wafer deposition, and cleaning includes single wafer cleaning and batch cleaning.



No.1

Technical service and marketing developed based on relationships of absolute trust with customers, built through the highest number of installations in the world

4 As of the end of March 2024

No.1

Globally No. 1 patents owned in the semiconductor production equipment industry

5 As of the end of March 2024
The figure is based on LexisNexis®PatentSight® database.

Material Issues

By practicing of our Corporate Philosophy through the realization of our Vision, we aim to expand medium- to long-term profit and to continuously enhance our corporate value; to that end, we have positioned key items that should be worked on with priority as our material issues, and these are reviewed each year. In the fiscal 2024, we reviewed the content of our existing material issues to make them more detailed, and identified new material issues.

Key items to be worked on with priority (material issues) → **Practice of our Corporate Philosophy through the realization of our Vision**; **Medium- to long-term profit expansion and continuous corporate value enhancement**

Material Issues Identification Process

We obtain the advice of a third party specialist regarding consideration of the process by which we identify material issues.

Analyze environment and determine issues

We analyze the status of social issues and the SDGs, business environments, the results of engagement with stakeholders[1] and key risks in our business activities[2] to determine issues that could become our material issues.

Social Issues

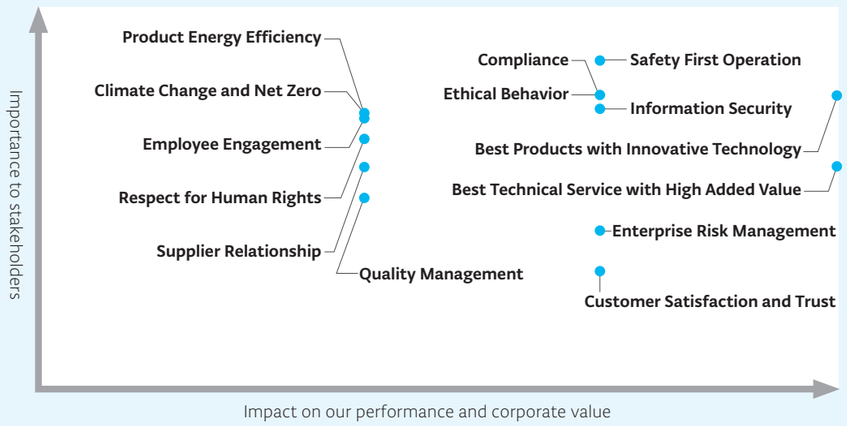
- Climate change, human rights issues, geopolitical confrontations, supply chain management, cybersecurity, price rises, etc.

Business Environment

- Further expansion of semiconductors and semiconductor production equipment markets as we move rapidly to a data-driven society, initiatives for the preservation of the global environment, human rights initiatives, further strengthening of corporate governance

Prioritizing/Mapping

Determined issues are evaluated and mapped on two axes: "Importance to stakeholders," which considers the impact on and interest of stakeholders, and "Impact on our performance and corporate value," which aims to continuously enhance our corporate value.



Identifying Material Issues

We identified key items as material issues following discussions and decisions by the Corporate Officers Meeting, participated in by the CEO, and a report to and approval of the Board of Directors.

In addition, we confirmed the material issues' relation to key indicators for continuous corporate value enhancement[3] and the SDGs to be addressed.

Furthermore, we clarified the main material issue initiatives in the value chain.

1 Stakeholder Engagement P. 25-26 2 Risk Management P. 75-76 3 Key Indicators for Continuous Corporate Value Enhancement P. 17-20

Identified Material Issues

Material Issues	Significance as Material Issues		SDGs to Be Addressed
	Our Significance	Significance to Society	
Climate Change and Net Zero	Reduce the environmental impact of businesses, products, and services to achieve net zero emissions	Reduce climate change risks and create new opportunities	7, 13
Product Energy Efficiency	Achieve both the process performance and environmental performance of products	Preserve the global environment by providing environmentally friendly products	12, 13
Best Products with Innovative Technology	Establish superiority by creating high-value-added products with innovative technology	Promote innovation and development of society through the evolution of semiconductors	9, 13
Best Technical Service with High Added Value	Expand business opportunities by providing advanced field solutions that solve customer issues	Improve semiconductor device yield and maximize equipment utilization rates	9, 12
Customer Satisfaction and Trust	Pursue customer satisfaction and build relationships of absolute trust as a sole strategic partner	Maximize return on investment and expand mutual benefits through co-creation	8, 17
Supplier Relationship	Carry out activities such as development, improvement, and quality improvement through collaboration	Maintain soundness and strengthen competitiveness throughout the supply chain	9, 17
Respect for Human Rights	Reduce human rights risks and respect individual dignity in business activities	Solve issues such as discrimination, inequality, and those related to labor and safety	10, 16
Employee Engagement	Create an environment where individuals can maximize their abilities and work actively	Provide various kinds of value that are beneficial to stakeholders	8
Safety First Operation	Achieve sustainable operations by putting safety first	Build a safe society	12
Quality Management	Pursue management efficiency through quality-focused operations	Create new value and strengthen competitiveness through quality improvement	12
Compliance	Comply with laws, regulations, industry codes of conduct, etc. as the basis for corporate reliability and sustainable growth	Improve compliance awareness and develop a compliance-oriented culture	16
Ethical Behavior	Strive to be a company with a strong sense of corporate social responsibility where our employees can take pride in their work and feel happy	Form a fair and orderly society	16
Information Security	Balance data utilization and information security by tackling cyberattacks, information leaks, etc.	Ensure information security without sacrificing convenience	9
Enterprise Risk Management	Aim for sustainable growth by appropriately responding to business risks and their impacts	Contribute to the medium- to long-term development of industry and society	8, 9

Medium-term Management Plan

Amid the rapid technological innovation of the electronics industry, Tokyo Electron, as the leading company in semiconductor production equipment, is actively expanding its business based on 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." In fiscal 2023, we formulated a new Vision aimed at further growth to become "A company filled with dreams and vitality that contributes to technological innovation in semiconductors," announced our Medium-term Management Plan and implement various initiatives toward its achievement.

Financial Targets

This Medium-term Management Plan sets financial targets, aimed at future growth, of further improvements to our world-class operating margin and ROE in fiscal 2027. Amid the expectation of further increasing demands for semiconductors and significant future growth in the semiconductor production equipment market, we will advance various initiatives anchored around material issues in the value chain, continue to strive for the Best Products, Best Technical Service and to achieve medium- to long-term profit expansion and continuous corporate value enhancement.

	Fiscal 2024 Performance	Financial Targets (Target Year: Fiscal 2027)
Net Sales	1,830.5 billion yen	3 trillion yen or more
Operating Margin	24.9%	35% or more
ROE	21.8%	30% or more

Main Initiatives[1]

- Expand our business in the fields of our expertise, using our accumulated technology, in areas where we can leverage our management know-how
- Introduce next-generation products with high added value required in the future by our customers into the market as early as possible and provide superior technological services
- Conduct proactive R&D investment worth more than 1 trillion yen in the five years from fiscal 2023
- We will work to sell parts, offer upgrades and modifications and improve the utilization rate based on the industry-leading approximately 92,000 units[2] we have installed to date, and endeavor to resolve issues such as yield enhancement for the devices that our customers produce. We will also aim to expand revenue in the after-market by providing such advanced field solutions. In addition, in preparation to support future cumulative installed equipment of over 100,000 units, we will also focus on developing highly efficient and high-value-added service through such means as remote maintenance services and predictive maintenance utilizing device operating data and AI
- We are expanding E-COMPASS, aimed at preservation of the global environment through the entire supply chain. We have formulated a roadmap and are conducting various activities aimed at achieving our medium-term environmental goals up to fiscal 2031 in order to strengthen environmental initiatives in our products, plants and offices. Furthermore, we are implementing initiatives to achieve reduction of greenhouse gas emissions to net zero by 2040[3]

1 In addition to these initiatives, with the aim of further profit generation and increased corporate value, we are planning growth investments and investments in human resources over five years from fiscal 2025.
R&D investment: Over 1.5 trillion yen, Capital expenditures: Over 700 billion yen, Human resources recruitment: Recruitment of 10,000 people globally (cumulatively over five years)
2 As of the end of March 2024
3 Moved the target year of the net zero from 2050 to 2040 in December 2023

Vision A company filled with dreams and vitality that contributes to technological innovation in semiconductors

Short and medium- to long-term profits expansion and continuous corporate value enhancement

Financial targets (fiscal 2027): Net sales of 3 trillion yen or more, an operating margin of 35% or more, and ROE of 30% or more

Net Sales	Operating Margin	ROE
• SAM[4] expansion and share increase • Continuously create next-generation products with high added value • Expansion of revenue in the after-market by providing advanced field solutions • Implementation of R&D expenses	• Expansion of cash flow • Increase of productivity through improvements in business operations, leveling production and standardization of specifications/parts • Improvement of employee engagement • Realization of work-life balance • Improved safety: No more than TCIR 0.10	• Pursuit of capital efficiency Appropriate cash allocation and balance sheet management • Pursuit of asset efficiency Reduction of productivity/start up lead time, pursuit of appropriate inventory levels and increase in capital expenditure efficiency

4 SAM: Served Available Market

Message from the Division Officer, Finance Division

Tokyo Electron will implement the following strategies and measures to realize its Vision and achieve its financial targets, while also contributing to the enhancement of corporate and shareholder value through engagement with capital markets.

Hiroshi Kawamoto
Senior Vice President &
General Manager
Division Officer, Finance Division

1 Growth Strategy

- Set medium-term financial targets for net sales of 3 trillion yen or more, an operating margin of 35% or more, and ROE of 30% or more by fiscal 2027
- Pursue high capital efficiency, including improving ROE, by further enhancing the operating margin (29.9%) and asset efficiency, which were achieved in the previous Medium-term Management Plan, and striving to expand cash flow
- Utilize the cash we have generated for growth investments and investment in human resources to generate technological innovation in semiconductors that supports the sustainable development of society

In February 2024, we also announced the following for our five-year plan starting fiscal 2025. Going forward, we will continue to accelerate a range of initiatives toward further growth.

- Proactive R&D investment worth more than 1.5 trillion yen
- Capital expenditures of over 700 billion yen to expand R&D and production capacity and improve productivity
- Recruitment of a cumulative total of 10,000 people globally

2 Financial Strategy

- Stabilize management by securing working capital for anticipated business expansion
- Maintain a solid financial position
- Pursue appropriate cash allocation and balance sheet management

We have achieved considerable growth over the years as a leading company in the semiconductor production equipment industry. We will continue to effectively utilize our cash for our next growth investments and pursue further business expansion in areas of high growth potential as we work to enhance our medium- to long-term corporate value. To realize our medium-term financial targets, we will implement financial strategies to support the targets.

3 Capital Policy

- Accurately understanding our own corporate value and evaluating stock prices and market capitalization
- Achieving an optimal capital structure with awareness of capital cost and capital profitability
- Executing continuous and aggressive returns to shareholders based on the expansion of cash flow

Backed by our recent strong profit growth and expectations for further growth in the future, our market capitalization has shown strong growth, resulting in our third place listing by market capitalization on the Tokyo Stock Exchange Prime Market as of the end of March 2024. Our Price Book-value Ratio (PBR) was also about 10 or higher as of the end of March 2024. As a result of the capital market's positive evaluation of our corporate value, stemming from our aggressive shareholder return policy, high-level growth investments, recruitment and fostering of excellent human resources based on our management strategy and collaborations with customers and suppliers and their results, our market capitalization has also increased significantly compared to net assets.

Market Capitalization

4 Shareholder Return Policy

- Follow a performance-linked model for dividends to shareholders and aim for a consolidated payout ratio of 50% of the net income attributable to owners of parent*
- Apply a flexible policy for repurchase of treasury stocks, taking into account the current cash position, funds for medium- to long-term growth investments, stock price levels and total return conditions

* However, ensure the amount of annual dividend per share is not less than 50 yen, and consider reviewing the dividend policy if net income is not generated for two consecutive fiscal years.

We will enhance shareholder value through shareholder returns by achieving world-class medium-term financial targets, a high level of dividends and flexible repurchases of treasury stocks.

We will continue working to achieve medium- to long-term profit expansion and continuous corporate value enhancement by actively implementing these strategies and measures.

Key Indicators for Continuous Corporate Value Enhancement

The Medium-term Management Plan clearly defines financial and sustainability metrics as "key indicators for continuous corporate value enhancement." In fiscal 2024, we confirmed the main material issues related to key indicators.

At quarterly review meetings attended by the CEO, we regularly check the progress and action plans, and various activities are carried out under the responsible persons for each indicator.

Target Area		Objective	Target Year	Fiscal 2024 Performance	Future Initiatives	Related Main Material Issues
Finance		• Net Sales: 3 trillion yen or more	Fiscal 2027	• 1,830.5 billion yen	Medium-term Management Plan P. 15-16	
		• Operating Margin: 35% or more	Fiscal 2027	• 24.9%		
		• ROE: 30% or more	Fiscal 2027	• 21.8%		
Research and Development		• Continuously create high value-added next-generation products by implementing R&D expenses of more than 1 trillion yen over five years	Fiscal 2027	• R&D investment 202.8 billion yen (Cumulative 394.0 billion yen from fiscal 2023)	• In anticipation of sustainable growth, engaging in continuous proactive R&D and capital investment • Development efficiency of shift to KPI and its operation • Implementation of simulations and making development risks visible from the development of IT systems • Further strengthening the developmental platform from DX implementation and the introduction of leading-edge equipment	
Environment	**Plants and Offices**	• Reduce total CO_2 emissions by 70% (compared to fiscal 2019)* * Change of goals starting in fiscal 2025 "Reduce total CO_2 emissions by 85% (compared to fiscal 2019)"	Fiscal 2031	• 75% reduction	• Visualization of energy usage and energy efficiency in business activities • Introduction of renewable energy in Taiwan, South Korea and Singapore	
		• A rate of 100% renewable energy usage	Fiscal 2031	• 90%	• Purchase of non-fossil certificates and securing of a continuous supply of renewable energy	
		• Reduce energy consumption (per-unit basis) by 1% from the previous fiscal year at each plant and office	Every fiscal year	• Achieved goal at 2 out of 11 plants or offices	• Re-confirmation of links between per-unit basis and energy consumption	
		• Maintain water consumption (per-unit basis) at each plant and office at individual base year levels	Every fiscal year	• Achieved 10 out of 13 goals	• Plan and implement actions related to water consumption reduction	
	Logistics	• Reduce CO_2 emissions of total logistics (own delivery) by 30% by further implementing modal shift and joint delivery	Fiscal 2027	• 18.4% reduction	• Expand modal shift and joint delivery, and introduce electric vehicles	
		• Reduce the usage ratio of wood packaging for products to 50% or less (packaging of semiconductor production equipment)	Fiscal 2024* * Extended to fiscal 2025	• 77.6% over the fiscal year (fourth quarter 73.6%)	• Standardization of Strong Triple Wall (STW) packaging and promoting further development for customers • Introduction of STW with fortified pillars that can handle marine transportation	
	Products	• Reduce per-wafer CO_2 emissions by 55% (compared to fiscal 2022)* * Changed in goals during fiscal 2024 from "Reduce per-wafer CO_2 emissions by 30% (compared to fiscal 2019)"	Fiscal 2031	• 24% reduction	• Further implementation of energy efficient equipment	
Employees	**Engagement**	• Engagement survey score: Continuously improve (increase score compared to the previous survey) or achieve a score higher than the average of other companies in each region	Every survey	• Analyze the results of the survey conducted in the fiscal 2023 and implement improvement plans for each company while listening to employee opinions (no surveys to be conducted in the fiscal 2024)	• Continue to implement measures related to engagement issues in each organization of each company • Considering and implementing measures related to "career opportunities," which is a common global issue (mentoring, coaching training for managers, etc.)	
		• Employee retention rates* Japan: 99% Overseas: Higher than the industry average * Excluding retirement at the mandatory retirement age and so on	Every fiscal year	• Japan: 98.8% • Overseas: Higher than the industry average (95.8%)	• Japan: Analyze retirement trends and reasons for voluntary resignations and implement countermeasures Strengthen support for mid-career employees, including aid in adapting to the workplace and working in accordance with offer details • Overseas: Analyze retirement trends and reasons for voluntary resignations at each company and implement countermeasures	
	Careers	• We have created an environment where every employee can create value for the Company's growth and for society with the support of supervisors and others by challenging themselves to do what they want while imagining their own futures (career paths) and growing.	Fiscal 2027	• Providing and supporting an environment for independent career development (enhancing communication within the organization, motivating, providing career opportunities, promoting career education, etc.) • New manager training (expanding to three times the training period)	• By continuing to hold workshops for managers, we will strengthen support regarding understanding the necessity in improving organizational capabilities and promoting behavior change • Promoting "skills management in development engineers" and "making career paths visual" over three years in collaboration with external agencies • Considering the conditions for senior open jobs* and implementing career education for mid-career and manager level employees * Internal recruitment system for reemploying people after reaching retirement age in the Group	
	Work-life Balance	• Annual paid leave utilization rate Japan: (1) 80% / (2) 90% Overseas: Equal to or better than the previous fiscal year's results	Japan: (1) Fiscal 2027 / (2) Fiscal 2031 Overseas: Every fiscal year	• Japan: 80.6% • Overseas: 69.0% (previous fiscal year's result: 65.6%)	• Conducting awareness activities, mainly targeting managers, to encourage taking paid leave, such as introducing examples of ways to take paid leave	
	Diversity, Equity & Inclusion	• Ratio of female managers Japan: 5% Global: 8%	Fiscal 2027	• Japan: 3.1% • Global: 6.3%	• Providing potential human resources with opportunities such as external training and utilizing women's networks • Setting KPIs for each company and business unit	

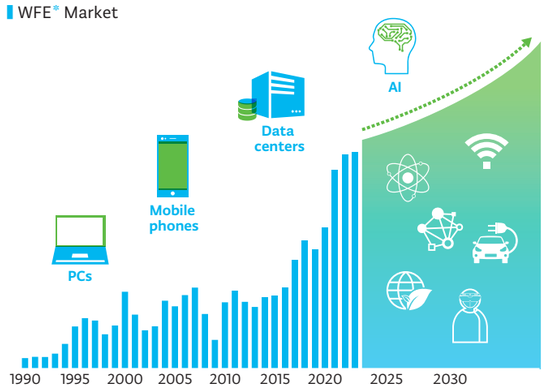
Target Area	Objective		Target Year	Fiscal 2024 Performance	Future Initiatives	Related Main Material Issues
Supply Chain Management	• Supply chain sustainability assessment implementation rate* * Additional goal from fiscal 2025: "Implementation of improvement activities in response to assessment results"	Material suppliers: Covering at least 85% of our procurement spend Logistics suppliers: 100% of customs-related operators Staffing suppliers: 100% of employment agencies and contracting companies (internal contractors)	Every fiscal year	• Material suppliers: Achieved 85% or more of our procurement spend • Logistics suppliers: Achieved 100% of customs-related businesses • Staffing suppliers: Achieved 100% of employment agencies and contracting companies (internal contractors)	• Assured implementation of actions for understanding issues and remediation based on assessment	
	• Supply chain BCP assessment implementation rate* * Additional goal from fiscal 2025: "Implementation of improvement activities in response to assessment results"	Material suppliers: Covering at least 85% of our procurement spend	Every fiscal year	• Material suppliers: Achieved 85% or more of our procurement spend	• Assured implementation of actions for understanding issues and remediation based on assessment	
Safety	• TCIR* No more than 0.10 (Globally No. 1 in the industry) * TCIR: Total Case Incident Rate. The rate of workplace incidents per 200,000 work hours.		Fiscal 2027	• TCIR 0.15	• Strengthening onsite inspections • Measures to prevent ergonomic injuries* • Establishing a safety training system • Strengthening accident analysis and incorporating accident analysis into safe equipment design * Ergonomic injuries: Work-related musculoskeletal disorders that arise due to fatigue and stress caused by machines and tools used by people	
Corporate Governance	• We are working at all times to establish an optimal and highly effective Board of Directors and an aggressive management execution system, and by continuously addressing issues based on evaluations of the effectiveness of the Board of Directors and input from institutional investors and other stakeholders, we will achieve solid corporate governance for enhancing corporate value over the medium to long term and sustainable growth. 1. Seeking a Board of Directors with high effectiveness • Audit & Supervisory Board System: Ratio of outside directors: One-third (including two females)*, Free and open discussions including corporate auditors • Off-site meetings: For discussions on medium- to long-term strategies, issues, etc. (twice annually) • CEO reports: Reports to the Board of Directors on the status of execution of key duties by the CEO (every Board of Directors meeting) • CEO mission: Information is shared concerning the CEO's mission for achieving the Medium-term Management Plan • Representative director assessment closed sessions: Sessions including corporate directors and Audit & Supervisory Board members but excluding the representative director (once annually) 2. Operating rhythm supporting the execution of business • Corporate Officers Meeting: The highest decision-making body on the executive side (once monthly) • Corporate Senior Staff (CSS) meeting: Global, across-the-board coordination of company-wide business execution (four times annually) • Quarterly review meeting: Monitoring the progress of the Medium-term Management Plan (four times annually) * Change from "Ratio of outside directors: one-third (including two females)" to "Majority ratio of outside directors" in fiscal 2025		Every fiscal year	1. Seeking a Board of Directors with high effectiveness • As a company with an Audit & Supervisory Board System, we maintain a ratio of one-half outside directors (3 out of 6). Continuing activities in the Nomination Committee with consideration for the majority The majority of director candidates proposed at the 61st Annual General Shareholders' Meeting are outside directors (4 out of 7) • Off-site meetings: 2 times (August and February) • At every Board of Directors meeting, in principle, the CEO explains important matters concerning business execution • CEO mission: Shared with members of the Board of Directors • Closed session on evaluation of representative directors: 2 times 2. Operating rhythm supporting the execution of business • Corporate Officers Meeting: 20 times • CSS meeting: 4 times • Quarterly review meeting: 4 times	We will engage in the initiatives below, and carry out periodic progress reviews to further increase efficacy in those areas. (Role and function of the Board of Directors) • Working backward from the future outlook for sustainable growth, the medium- to long-term perspective for the Company will be shared at the Board of Directors meetings and off-site meetings, and the functions and roles that the Board of Directors should play, and the state of its governance system will continually be discussed • From the perspective of increasing the Company's corporate value, the Board of Directors' agenda will continue to be set appropriately, while working to align its perspective on medium- to long-term growth strategies and further enhance strategy discussions (Further strengthening of operational systems and acceleration of succession planning) • The existing system of Corporate Officers that also serve as division managers will be revised and a Division Officer system will be newly introduced. As a result, the system will be that Corporate Officers who share the same perspective as the CEO will focus on higher-level management issues, while Division Officers, which are composed mainly of next-generation management personnel, will supervise business execution in each division	
Risk Management	• We are building and further improving a highly effective risk management system that supports a strong management foundation. • We are enhancing risk management and compliance based on the slogan "Safety, Quality and Compliance. Our top priority. It's our pride." Together with establishing a dedicated Compliance Department at our headquarters and appointing a Chief Compliance Officer and Regional Compliance Head, we are also conducting assessments by external agencies and undertaking education.* • We are conducting supervision and monitoring through reports to the Corporate Officers Meeting—the highest decision-making body on the executive side—and the Board of Directors (twice annually). • To conduct appropriate measures with certainty across the entire Group, we are identifying risks (12 risks in fiscal 2024) expected in the execution of business centered on the Risk Management Committee and deploying them in the activities of each company. • We are continuously conducting activities to foster awareness about safety, compliance and risk management, and reflecting the awareness of all executives and employees as well as their autonomous and specific initiatives in our human resource evaluation. * Change from "Together with establishing a dedicated Compliance Department at our headquarters and appointing a Chief Compliance Officer and Regional Compliance Head, we are also conducting assessments by external agencies and undertaking education" to "Close collaboration between the Chief Compliance Officer of Tokyo Electron Group and Compliance Officers at domestic and international subsidiaries and continually foster a corporate ethical culture to prevent serious incidents, and establish a compliance posture" in fiscal 2025		Every fiscal year	• Establishment and implementation of risk management activities across Group companies using GRC tools* • Continuously review risk scenarios considering the recent business environment and implement risk management activities based on 12 risks in fiscal 2024 • Implement initiatives to hold Risk Management Committee and establish Risk Management Committees for each company to further strengthen the structure of each Group company • Strengthen the organizational structure of compliance through regular meetings with the Business Ethics Committee and each company/subsidiary. Consider introducing compliance assessments by external agencies • Continued implementation of ethics, compliance and risk management trainings (training for newly assigned group leaders and vice presidents) * GRC tools: A system that contributes to managerial decision-making in a timely manner by systematically organizing multi-layered and complex corporate management functions and management information collected through the integration of Governance, Risk and Compliance (GRC) measures	• Establishing a highly effective risk management PDCA structure in all Group companies, early detection of priority risks assumed in business execution and assured implementation of measures • Promoting and improving necessary compliance programs in consideration of assessment results from RBA audits and external agencies • Revision and execution of the risk management and compliance educational training plan in consideration of human resources strategies at each Group company (mainly for managers, mid-career employees and new graduate employees)	

Outlook of Semiconductor Production Equipment Business

While a correction phase in the global semiconductor market continued on top of increasing semiconductor inventories, the supply/demand balance improved in the second half of 2023. Growth of the AI server market and increasing expectations for on-device AI as well led to rediscovery of growth potential in the semiconductor industry.

Going forward, further growth in the semiconductor and semiconductor production equipment markets is expected as the range of AI-based applications expands.

* 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. WFE refers to the production equipment used in front-end production and in wafer-level packaging production.

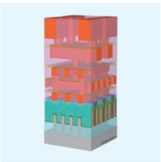


Source: TechInsights Inc. (1990-2023)

Semiconductor Device Technology Evolution and Business Opportunities

Further growth in the semiconductor and semiconductor production equipment markets will be supported by technological innovation in semiconductor devices. In logic, DRAM and NAND devices, demand is expected to continue increasing for improved transistor performance and greater storage capacity through further scaling and higher multi-layering, as well as for lower manufacturing costs and lower power consumption. We will utilize our broad product lineup and maximize quality in each process, while also providing customers with high added value through process-to-process integration, to contribute to technological innovation for semiconductor devices.

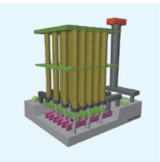
Logic



Transistor structures for leading-edge logic devices will shift from the current FinFET[1] structure to new structures (GAA NS[2] and CFET[3]). With increasing patterning complexity, and application of high-NA EUV[4] lithography technology to mass production to achieve further scaling, co-optimization between unit processes will become even more necessary. In wiring technology as well, progress is being made in development of new materials instead of copper, and backside wiring to reduce power supply wiring resistance. Our front-end process equipment and wafer bonding/debonding equipment will contribute to the realization of this kind of technological innovation.

1 FinFET: Fin Field Effect Transistor, a process technology with a three-dimensional structure in the shape of a fin
2 GAA NS: Gate All Around Nanosheet, a next-generation technology for FinFET
3 CFET: Complementary Field Effect Transistor, transistor with a new structure
4 High-NA EUV: Refers to next-generation EUV, an exposure technology that shortens the resolvable line width by increasing the numerical aperture (NA)

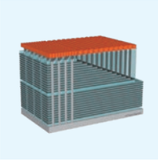
DRAM



In DRAM, technologies for forming high aspect ratio[1] capacitors and contacts are becoming increasingly important, while many of our deposition, etch and cleaning systems are used for these technologies. In the future, current 2D layouts are expected to change to new 2D layout structures and shift to 3D DRAM with vertically-stacked memory cells. We will therefore continue to provide new products and solutions to contribute to this kind of technological innovation. Demand is also increasing for HBM[2] in AI applications because it enables data transfer across a wide bandwidth. HBM is achieved through production of stacked DRAM chips, which will require equipment for many more processes than before, including wafer bonding/debonding equipment. We will contribute to technological innovation by working with customers to create and support processes for such leading-edge technologies as well.

1 Aspect ratio: Depth to width ratio of the pattern formed on the wafer
2 HBM: High Bandwidth Memory

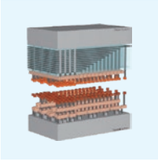
NAND



3D NAND high multi-layering is progressing even further, with layer counts expected to increase to 500 and 1,000 in the future. Accordingly, this will require etching that enables processing of deep holes and trenches with a high aspect ratio, sacrificial film deposition and removal, and atomic level deposition on 3D structures. As memory capacity increases, there is a need for increased data transfer speeds. Enhanced performance of peripheral circuits is essential to achieve this, but there is an issue with the thermal process, used when molding memory cells, creating limitations on performance and scaling. To resolve this, development is underway to enable use of 3D integration technology in mass production to manufacture and bond memory cells and peripheral circuits on separate wafers, which will also enable optimization of chip size. We are striving to further improve the performance of our etch, ALD* and wafer bonding/debonding equipment to meet these technological requirements.

* ALD: Atomic Layer Deposition

Advanced Packaging and 3D Integration



There are two main approaches to semiconductor manufacturing that will lead to technological innovation in semiconductors. The first is scaling, which has become synonymous with the evolution of semiconductors and which refers to increasing the level of semiconductor integration on chips. The second is advanced packaging. This refers to technologies for integrating multiple chips and functions into a single chip, which includes combining processors and HBM into AI devices. Already employed in a range of devices, the application of advanced packaging is expected to further expand in scope going forward. In addition to providing scaling solutions, we are also focusing on wafer bonding as part of these technologies. In terms of 3D integration based on wafer bonding, as applied to NAND and CMOS image sensors in front-end processes and HBM and other technologies in packaging processes, we will contribute to evolving performance of leading-edge devices and at the system level. We will do this by providing wafer bonding/debonding equipment and laser edge trimming systems while leveraging the technologies and experience we have cultivated in front-end processes overall.

Shift Left

We are focused on using the Shift Left approach, investing resources such as technology, personnel and expense into the early processes of product development. Through this approach, we are endeavoring to develop various technologies and conducting research for multiple future generations to realize the technology roadmaps we have created with customers.

With product development through the Shift Left approach, we understand customer needs at an earlier stage, reflect the information obtained from feedback into our technological development and propose superior products. This contributes to maximizing yield for customer devices and capacity utilization of their mass production line equipment. We are also promoting on-site collaboration for early delivery of evaluation equipment to customers' fabs and development and research laboratories, and are working to accelerate the process in which technological development is reflected in mass production equipment as well as to optimize development efficiency.

Further Strengthening of Development Structure

We are actively investing with a focus on further growth as we endeavor to further strengthen our development structure. To this end, we have completed construction of Miyagi Technology Innovation Center and a new development building at Tokyo Electron Technology Solutions Hosaka Office. We are also planning to open and operate new development buildings at Tokyo Electron Miyagi and Tokyo Electron Kyushu from 2025.

Miyagi Technology Innovation Center
(Completed in September 2021)

Tokyo Electron Technology Solutions
Hosaka Office New Development Building
(Completed in July 2023)

Tokyo Electron Miyagi
New Development Building
(Completion scheduled for spring 2025)

Tokyo Electron Kyushu
New Development Building
(Completion scheduled for summer 2025)

Value Creation Model

Utilizing the capital we hold to the maximum capacity (INPUT) while leveraging our strengths, we implement the value chain of our business activities anchored around material issues. We offer the value created (OUTCOME) from this process to our stakeholders. By practicing our Corporate Philosophy through the realization of our Vision, we aim to expand medium- to long-term profit and to continuously enhance our corporate value.

INPUT (investment capital) Fiscal 2024

Financial capital

Net assets **1,760.1** billion yen
Equity ratio **71.1**%
Total assets **2,456.4** billion yen

Manufactured capital

Manufacturing sites **9** total (6 in Japan and 3 overseas)
Manufacturing-related capital investment, such as new plant buildings and manufacturing equipment
Component standardization and leveling production
Many years of know-how and proven performance in manufacturing operations
Manufacturing core system

Intellectual capital

R&D sites **14** total (7 in Japan and 7 overseas)
R&D investment **202.8** billion yen
A high level of expertise in numerous areas, and the ability to fuse this knowledge together to create new products
Broad-ranging knowledge and integrated technological capabilities in semiconductor manufacturing processes
Customer requests and technology trends
Equipment-related data accumulated through digital technology and knowledge management

Human capital

Number of employees **17,702**
Proportion of engineers **68.1**%
Human resources possessing knowledge in a variety of specialized fields
Personnel able to perform globally
Human resource development through TEL UNIVERSITY

Social and relationship capital

Relationship of mutual trust with customers built through many years of performance records
Strong partnerships with our suppliers
Foundation for business activities in local communities
Collaboration with other companies in the industry through industry associations

Natural capital

Energy consumption **102,260**kL
Water consumption **1,542,000**m³

The strength of our company built by the driving forces of growth

P. 12

Installation and Maintenance Services
Provide prompt and accurate high-value-added service supporting the stable operation of equipment

Research and Development
Continuously strengthening research and development to create innovative and unique technologies in a timely manner

Material Issues
P. 13-14

Sales
Propose optimal solutions as the sole strategic partner for customers

Procurement and Manufacturing
Efficiently manufacturing high-quality products backed by a sustainable supply chain

OUTPUT

Semiconductor Production Equipment
Field Solutions

OUTCOME (created value) Fiscal 2024

Financial capital

Net Sales **1,830.5** billion yen
Operating margin **24.9**%
Net income **363.9** billion yen
ROE **21.8**%
Total annual dividend **182.4** billion yen (dividend payout ratio: 50.1%)

Manufactured capital

Cumulative number of equipment installations Approximately **92,000** units (annual shipment volume of approximately 4,000-6,000 units)
High-quality and superior-reliability products incorporating leading-edge technologies
Safety-first operation: TCIR **0.15**
Reduction of production lead times

Intellectual capital

Innovative, high-value-added unique technologies
Product lineup with No. **1** or No. **2** market share
Optimal solutions for semiconductor manufacturing
Number of patents owned **23,249**
High-quality and highly efficient service

Human capital

Retention rate* **97.5**%
* Calculated using data on turnover rate
Improvement in desire for growth and demonstration of the challenge spirit in employees, who both create and fulfill company values
Building of relationships of trust with stakeholders by employees with a high level of engagement
Ratio of female managers* **6.3**%
* Include individual contributors and employees reemployed after retirement

Social and relationship capital

Percentage of respondents who selected "Very Satisfied" or "Satisfied" in the Customer Satisfaction Survey* **100**%
* For each question, average score is calculated for all customers who responded
Rate of improvement after supply chain sustainability assessment **29.2**% (compared to fiscal 2023)
Creating employment opportunities in and paying taxes to local municipalities and nations where we carry out business activities
Number of TEL FOR GOOD* programs **285**
* The brand name for Tokyo Electron's social contribution activities

Natural capital

Own CO_2 emissions **75**% reduction
(compared to fiscal 2019, reduction of 131 kilotons due to the introduction of renewable energy, etc.)
CO_2 emissions not from our Group (per wafer) **24**% reduction (compared to fiscal 2022)
Waste material recycling rate **98.8**%

IMPACT

Stakeholders	Impact
Shareholders/ Investors	• Return of profit generated from business activities • Realization of medium- to long-term growth and enhancement in corporate value
Customers	• Value creation and continuous growth for customers • Improving productivity (utilization rate and yield) and reducing the environmental impact in semiconductor manufacturing
Suppliers	• Deployment of business operations across our sustainable and highly competitive supply chain • Improving added value of products and services handled, through collaboration with us
Employees	• Creating a workplace environment replete with dreams and vitality that enables employees to realize their full potential based on mutual trust between the organization and individuals
Local Communities	• The revitalization of and sustainable development in local communities through human resource development, employment opportunities, initiatives to preserve the local environment and paying taxes to local municipalities
Governments/ Associations	• Carrying out business activities that comply with laws and regulations, industry codes of conduct and other rules • Initiatives that help the industry and society solve issues and develop through collaboration with us

Practice of our Corporate Philosophy through the realization of our Vision

Stakeholder Engagement

We actively create opportunities for dialogue and hold mutual communication with our stakeholders to allow us to accurately comprehend their demands and expectations as we deploy our business activities. We strive to build a solid relationship of mutual trust with all the stakeholders surrounding our company by working steadily to fulfill our roles and responsibilities in society.

Shareholders/Investors

Relationship with Stakeholders	• Shareholders and investors provide our company's capital, while expressing their opinions, demands and expectations of our company from the shareholder/investor perspective through constructive dialogue and through exercising their voting rights at the Shareholders' Meeting • We share our management vision and growth scenario with shareholders and investors, and incorporate the opinions and demands we hear from them into our management in an effort to enhance our corporate value
Value Provided to Stakeholders	• Return of profit generated from business activities • Enhanced corporate value through the realization of our medium- to long-term growth
Main Engagement Opportunities	• Earnings release conference, Medium-term Management Plan briefing, IR Day • IR conference, IR road show*, individual IR interview • Shareholders' Meeting * IR road show: IR activities presented directly to shareholders and investors

Customers

Relationship with Stakeholders	• Customers purchase the semiconductor production equipment we provide and also utilize services necessary for maintaining that equipment • We not only provide products, services and solutions but also create technology roadmaps spanning multiple generations and carry out joint technology development with customers
Value Provided to Stakeholders	• Best Products with innovative technology • Best Technical Service with high added value • Environmentally friendly products and services with a focus on safety and quality • Solutions that satisfy a variety of application needs
Main Engagement Opportunities	• Technology conference • Joint development • Customer Satisfaction Survey

Governments/Associations

Relationship with Stakeholders	• Governments and associations not only require companies to comply with laws, regulations, industry codes of conduct and other rules, but also aim to work in partnership with companies to bring about development at the industrywide, national and community level • While carrying out our business activities in compliance with such laws, regulations, industry codes of conduct and the like in the countries and communities where we operate, we contribute to social development and the resolution of societal issues by accurately grasping social needs
Value Provided to Stakeholders	• Solutions that help the industry and society solve issues and develop • Business activities that comply with laws, regulations, industry codes of conduct and other rules
Main Engagement Opportunities	• Cooperation with government and administrative agencies • Collaboration with global initiatives and NGOs etc. • Industry group activities

Suppliers

Relationship with Stakeholders	• Suppliers supply the materials and human resources necessary for our company's business administration, and also perform customs clearance, logistics operations and other operational services • In addition to purchasing these materials and operational services, we cooperate with our suppliers on the further development and improvement of these aspects and enhancement of their quality. We build a sustainable supply chain that takes into account labor, the environment, health and safety, ethics and the like
Value Provided to Stakeholders	• Social issue initiatives and further improving added value of products and services through collaboration with our company • Business opportunities in the semiconductor production equipment markets • Maintaining soundness and strengthening competitiveness throughout the entire supply chain
Main Engagement Opportunities	• Production update briefing • TEL Partners' Day/TEL E-COMPASS Day • Sustainability Assessment • STQA* audit * STQA: Supplier Total Quality Assessment

Local Communities

Relationship with Stakeholders	• Local communities are striving to offer more value by working to foster local industry and educate human resources • We contribute to the development of the local communities where we operate through employment opportunities, initiatives to preserve the local environment and paying taxes to local municipalities
Value Provided to Stakeholders	• Human resources development and employment opportunities • Promotion of environmental preservation in communities • Financial contributions through tax payments
Main Engagement Opportunities	• TEL FOR GOOD (Social contribution activities) • Tours of plants and offices • Environmental debriefing

Employees

Relationship with Stakeholders	• Our employees contribute to enhancing our corporate value by demonstrating their individual capabilities and pursuing personal growth through making use of opportunities for education • We promote the improvement of employee engagement under management that emphasizes employee motivation
Value Provided to Stakeholders	• A workplace environment replete with dreams and vitality that respects diversity and enables employees to realize their full potential based on mutual trust between the organization and individuals • Opportunities for career development and skill improvement • Fair performance review and remuneration commensurate with results
Main Engagement Opportunities	• Employee meeting • Global engagement survey • Training and workshops

Initiatives in the Value Chain

Leveraging our unique characteristics, we have built a superior business model and continually create new value by the value chain of our business activities anchored around material issues.

Main Material Issue Initiatives in the Value Chain

Research and Development

Continuously strengthening research and development to create innovative and unique technologies in a timely manner

Climate Change and Net Zero

- New Technologies Development P. 32

Product Energy Efficiency

- Strengthening Research and Development Capabilities P. 31
- New Technologies Development P. 32

Best Products with Innovative Technology

- Strengthening Research and Development Capabilities P. 31
- Collaboration with Consortiums and Academia P. 31
- Marketing P. 32
- New Technologies Development P. 32

Customer Satisfaction and Trust

- Marketing P. 32

Quality Management

- Process Development with AI Using Machine Learning P. 32

Procurement and Manufacturing

Efficiently manufacturing high-quality products backed by a sustainable supply chain

Climate Change and Net Zero

- Communication with Our Suppliers P. 35
- Initiatives to Reduce Environmental Impact P. 36

Supplier Relationship

- Sustainable Procurement Strategies P. 35
- Communication with Our Suppliers P. 35
- Initiatives to Reduce Environmental Impact P. 36

Employee Engagement

- World-class Manufacturing Operations P. 35

Safety First Operation

- Sustainable Procurement Strategies P. 35
- World-class Manufacturing Operations P. 35

Quality Management

- Sustainable Procurement Strategies P. 35
- World-class Manufacturing Operations P. 35

Enterprise Risk Management

- Sustainable Procurement Strategies P. 35

Sales

Propose optimal solutions as the sole strategic partner for customers

Best Products with Innovative Technology

- Proposing Customer Solutions Leveraging a Wide Range of Product Lineup P. 39
- Expansion into the Diversified Semiconductor Market P. 40
- Initiatives for Improvement of Customer Satisfaction P. 40

Best Technical Service with High Added Value

- Development of Global Operations P. 39
- Initiatives for Improvement of Customer Satisfaction P. 40

Customer Satisfaction and Trust

- Development of Global Operations P. 39
- Proposing Customer Solutions Leveraging a Wide Range of Product Lineup P. 39
- Expansion into the Diversified Semiconductor Market P. 40
- Initiatives for Improvement of Customer Satisfaction P. 40

Safety First Operation

- Initiatives for Improvement of Customer Satisfaction P. 40

Quality Management

- Proposing Customer Solutions Leveraging a Wide Range of Product Lineup P. 39
- Initiatives for Improvement of Customer Satisfaction P. 40

Installation and Maintenance Services

Provide prompt and accurate high-value-added service supporting the stable operation of equipment

Climate Change and Net Zero

- Support Services that Extend the Lifecycle of Equipment P. 43

Best Technical Service with High Added Value

- Globalize Field Engineers and Strengthen Customer Responsiveness P. 43
- Support Services that Extend the Lifecycle of Equipment P. 43
- Promotion of High-value-added Services P. 44
- Global Expansion of Training for Customers P. 44

Customer Satisfaction and Trust

- Globalize Field Engineers and Strengthen Customer Responsiveness P. 43
- Global Expansion of Training for Customers P. 44

Safety First Operation

- Global Expansion of Training for Customers P. 44

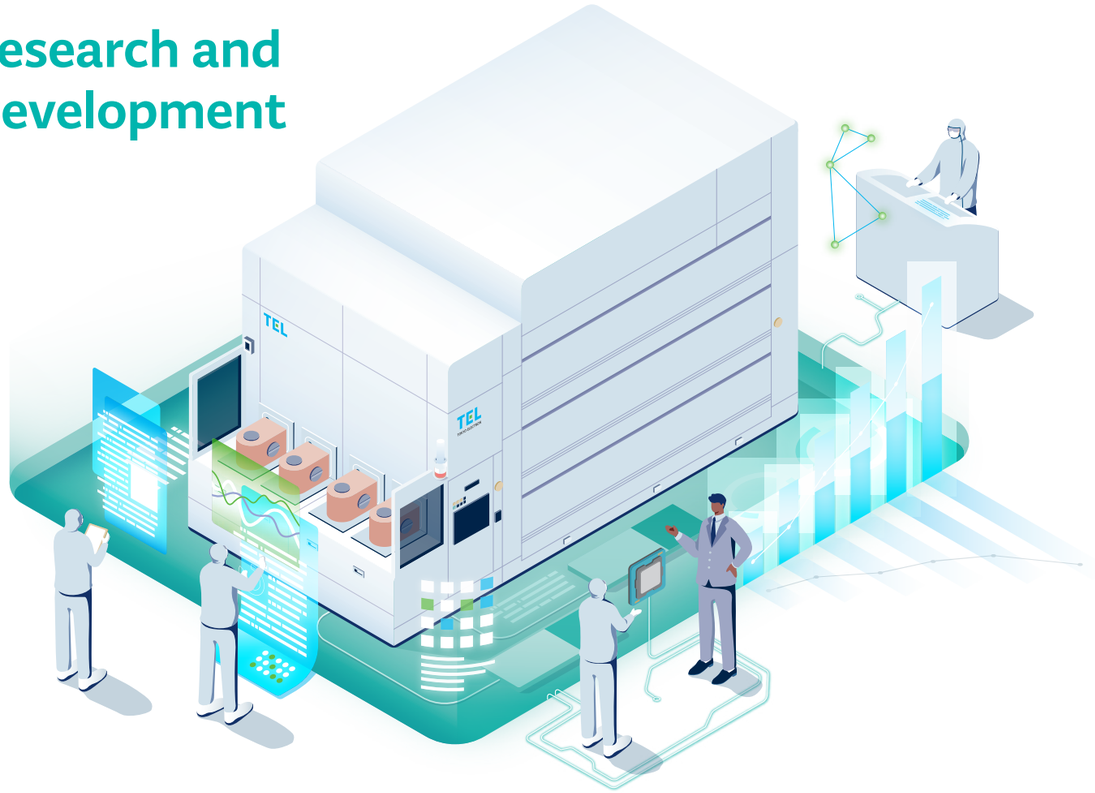
Quality Management

- Globalize Field Engineers and Strengthen Customer Responsiveness P. 43
- Promotion of High-value-added Services P. 44

Sustainability Initiatives in the Value Chain P. 45-78

Initiatives in the Value Chain

Research and Development



Ascertaining trends in the market and technologies as well as customer needs early on, we will efficiently promote Research and Development (R&D) covering fundamental technologies to mass-produced products through the utilization of in-house and outside knowledge and global collaboration. We will develop unique technologies with an eye towards the future and create high-value-added next-generation products that contribute to technological innovation in semiconductors.

Key Themes for Medium- to Long-term Value Creation

- Timely development of high-value-added technologies and products through promotion of Shift Left
- Further pursuing development efficiency and strengthening human resource development
- Development of new products and functions with highest performance through the organic integration of specialized expertise in various fields

Management Resources to Be Invested

Intellectual capital	Intellectual capital	Human capital
R&D investment Over five years, beginning in fiscal 2025 more than **1.5** trillion yen	R&D sites **14** (7 in Japan and 7 overseas)	**Human resources possessing knowledge in a variety of specialized fields** related to semiconductor production equipment

Differentiation Points

Strategic Research and Development

- Global marketing
- Ascertaining technological trends and customer needs early on through service support activities to reflect them in product planning and development
- Formulating and implementing short-term as well as medium- to long-term development strategies that are associated with the existing businesses

Collaboration System

- Close partnerships among our development sites in Japan and overseas, business divisions and Corporate Innovation Division
- R&D with customers with an eye toward several generations in the future
- Diverse collaborations with consortiums, academia and suppliers

Development Efficiency

- Pursuit of development efficiency and creation of new values by digital technology utilizing AI through promoting digital transformation (DX)

Intellectual Property

- Globally No. 1 number of patents owned in the semiconductor production equipment industry and development of intellectual property management

Value Created

Innovative, high-value-added **unique technologies** that contribute to leading-edge semiconductor production	**Equipment highly advantageous** such as in higher throughput, a higher utilization rate and smaller space requirements	**Environmental performance** contributing to the achievement of net zero

Related Main Risks Risk Management P. 75-76

Risk 2	Risk 9	Risk 11
Research and Development	Intellectual Property Rights	Human Resources

Main Material Issue Initiatives in Research and Development

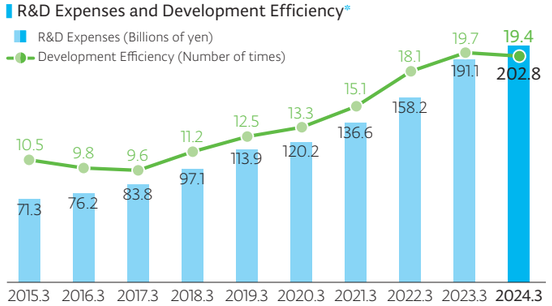
Strengthening Research and Development Capabilities

To continuously create the high-value-added next-generation products needed for technological innovation in semiconductors and bring them to the market in a timely manner, domestic and overseas development sites, our business divisions and the Corporate Innovation Division take advantage of their respective individuality and collaborate in necessary areas for us to promote technological development and integration. We construct development systems ranging from fundamental technologies to mass-produced products and promote DX that uses AI technologies in our R&D. In five years starting from fiscal 2025, we will spend more than 1.5 trillion yen for R&D expenses to continue and accelerate these activities. In addition, by monitoring the contribution of the R&D expenses and their deliverables to net sales, we will check our development efficiency using R&D expenses in the past five years and net sales in the next five years to implement activities to further increase our development efficiency.

Each development site and business divisions have an eye toward future generations and are engaged in the development of innovative technologies. They also promote R&D related to peripheral technologies. The Corporate Innovation Division is developing cross-functional initiatives in each product area as well as promoting and optimizing R&D with a bird's eye view on the entire development structure. In addition, the division is also engaged in a search for potential growth areas, as well as in R&D of fundamental technologies toward creating value in the future.

For excellent deliverables of research and development in each site of our Group, awards from Global Awarding System as well as Excellence awards of our internal technology conference, Sustainable Technology Award and DX Award are granted to enhance engineers' motivation to create products.

R&D Expenses and Development Efficiency*



* Aggregated by dividing the total net sales in the last 5 years by the total R&D Expenses in 6 to 10 years before

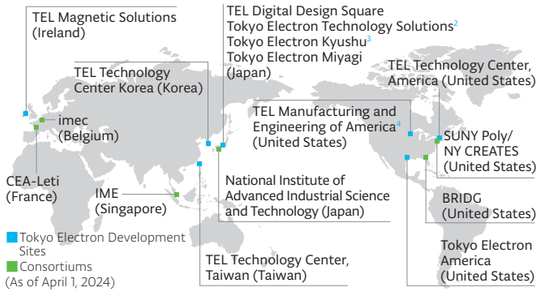
Collaboration with Consortiums and Academia

For many years, we have been focusing on joint research and development efforts with domestic and international consortiums and academia (universities). These initiatives help develop the development infrastructure to maximize the benefits of open-innovation-based development in each region. In recent years, we are also making efforts to boost human resource development in the semiconductor industry through collaboration with major universities in Japan and abroad.

We continue our development in various areas from applications to products through efforts such as R&D underway for the front-end and back-end areas at TEL Technology Center, America, participation in a global research hub for hardware development of next-generation AI, leading-edge logic development and quantum computing development, collaboration with imec in the logic process development and for patterning technology in EUV and high-NA EUV ranges, and collaboration with BRIDG, a not-for-profit, public-private partnership. In the semiconductor industry, in which the speed of technological innovation is rapid, developing new technologies in advance is a source of corporate growth. We will not only develop leading-edge exposure technology but contribute to the creation of innovation with new structures/new materials such as CFET and TMDC[1] by extracting and identifying technology change points by conducting market research with an eye towards ten years ahead.

In our collaboration with the National Institute of Advanced Industrial Science and Technology (AIST), one of Japan's largest public research institutions, we leverage its world-class research environment and personnel to enhance our own research and development capabilities by conducting development of leading-edge fundamental technologies required for diversified semiconductor device production and research in TMDC and 2D materials.

1 TMDC: Transition Metal Di-Chalcogenide, a material used for 2D transistors such as WS2, MoSe2.



2 Fujii Head Office, Hosaka Office, Tohoku Office
3 Koshi Head Office, Ozu Office
4 Chaska Head Office, Chelmsford Office

Marketing

Based on the roadmaps of device technology and customer products as well as competitive analysis, marketing departments of business divisions, accounts and the corporate organization play respective roles appropriately and collaborate with each other to realize medium-term and long-term management plans.

Marketing departments of Business Units (BUs) in Business Divisions conduct planning of advanced next-generation products and promotion activities based on it to satisfy the needs of customers in the target market segments of respective BUs. On the other hand, marketing departments of account and corporate organizations conduct planning of integration that combines next-generation products of business divisions across BUs and planning of advanced new products not included in the product portfolio of business divisions to solve future High Value Problems (HVPs) of the customers. In addition, they propose solutions based on the above planning.

In the semiconductor industry, where business environment changes drastically, companies need the flexibility to change policies in a timely manner as circumstances require. Our marketing departments work together in performing their activities that anticipate market needs and contribute to customers' products as well as help improve our product competitiveness and promote our Shift Left approach.

New Technologies Development

We are developing new technologies and new products by utilizing and organically integrating our expertise in various fields. As an example, we have developed an innovative etch technology capable of producing memory channel holes[1] in advanced 3D NAND devices with a stack of over 400 layers. The new process developed has brought dielectric etch application to the cryogenic temperature range for the first time, producing a system with exceptionally high etch rates. With this new innovative technology, etching of 10 μm in depth with a high aspect ratio[2] can be formed to be quite well-defined (Figure 2) in a short period of 33 minutes, allowing global warming potential to be reduced by 84% compared with previous technologies. Potential innovations enabled by this technology will spur the creation of 3D NAND flash memory with even larger capacity.

1 Memory channel holes: Holes working as memory elements
2 Aspect ratio: Depth to width ratio of the pattern formed on the wafer

Figure 1. 3D NAND

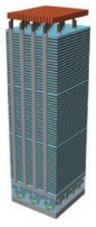
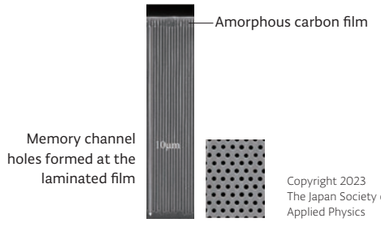


Figure 2. Image of Hole Pattern (left) and Hole Bottom Cut (right)



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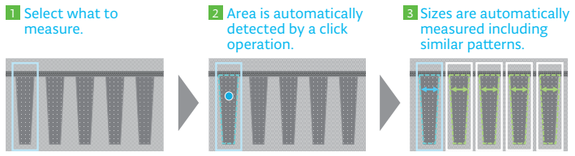
Process Development with AI Using Machine Learning

We have been quick to introduce a generative AI system that is available across the Company, as AI has been more and more put to practical use in society. In addition, we are developing generative AI specialized in software for semiconductor production equipment to accelerate product development.

In the development for semiconductor manufacturing process, we use images taken by Scanning Electron Microscope (SEM) and measure the sizes of various microscopic structures such as linewidth and hole diameter to check process results on wafers to determine whether required results are obtained.

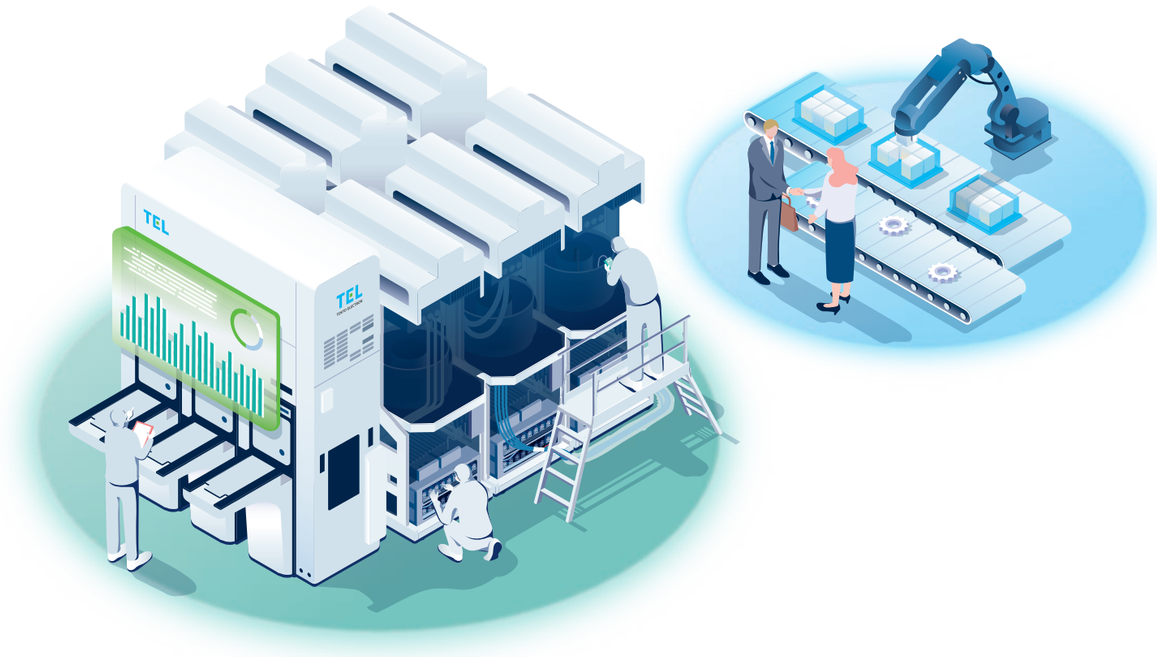
For this task, we have developed and used a tool applying machine learning so far, but preparation for measuring new shapes has taken long hours. In fiscal 2024, we developed a new image length measuring tool that can measure any shape quickly and easily. With this new tool, preparation for measurement is no longer required and engineers involved in the process development can measure shapes on wafers by a simple operation, increasing productivity in process development.

How the Automatic Length Measuring Tool Is Used



Initiatives in the Value Chain

Procurement and Manufacturing



We constantly pursue production innovation based on the themes of safety, high quality and superior reliability, and put together manufacturing operations that are environmentally friendly. We conduct standardization and leveling production so that we can respond swiftly to market fluctuations and are further improving our efficiency through the implementation of Smart Manufacturing. We establish stable production capabilities by building a sustainable supply chain through partnership with our suppliers.

Key Themes for Medium- to Long-term Value Creation

- World-class manufacturing operations through the realization of Smart Manufacturing concepts
- Pursuit of efficiency and optimal management resource allocation linked to further improvements in operating margin and ROE
- Co-creation of value through solid relationships of trust with suppliers

Management Resources to Be Invested

Manufactured capital/Human capital	Manufactured capital	Social and relationship capital
Many years of know-how (people and products) in semiconductor production equipment business	**Manufacturing core systems** that make full use of the latest digital technologies	**Strong cooperative working relationships** with suppliers

Differentiation Points

Quality and Reliability

- Thorough quality focused operations based on the Quality Policy
- Utilizing our manufacturing know-how and knowledge, and carrying out thorough quality management in each process

Pursuit for Efficient Productivity

- Shift Left practices for operational efficiency
- Advancement of standardization and leveling production
- Implementation of Smart Manufacturing

Sustainable Procurement Activities

- Creation of new value through collaboration with suppliers
- Pursue efficiency through ONE TEL* operations
- Sustainability initiatives including occupational safety and health

* Refers to the Group coming together as a whole to attain the same goals

Initiatives to Achieve Net Zero

- Activities to reduce environmental impact in plants and offices as well as logistics
- Partnerships across the entire supply chain
- Reduction of CO_2 emissions during use of our products

Value Created

High-quality and superior-reliability products	Shortening of production lead times	Contributions to the global environment preservation
incorporating leading-edge technologies	through stable and efficient manufacturing operations	

Related Main Risks Risk Management P. 75-76

Risk 4	Risk 5	Risk 6	Risk 7
Procurement, Production and Supply	Safety	Quality	Environmental Issues

Main Material Issue Initiatives in Procurement and Manufacturing

Sustainable Procurement Strategies

In the semiconductor production equipment business, supply chain management is becoming increasingly important. To conduct business activities effectively and reliably, it is extremely important to strategically carry out sustainable procurement activities.

The Corporate Production Division conducts periodic supply chain BCP assessments, investigations into risk components and systemization of supplier maps to make supply chain risks visible. Furthermore, as part of proactive procurement activities, we are engaged in strengthening supplementary parts systems between manufacturing sites and examining procurement processes as well as optimizing procurement and parts inventories throughout the entire Group.

In addition, we are working to adjust sales plans with production, procurement and inventory plans by sharing not only short-term, but also medium-term order forecasts between sales and manufacturing divisions, as well as working to ensure stable procurement and both production and start-up process leveling.

Through these efforts, we are seeking to further improve safety, quality and efficiency of equipment production and start-up.

Communication with Our Suppliers

Based on the belief that smooth communication with suppliers is important, we hold production update briefings, TEL Partners' Day and other events on a regular basis to create opportunities to share market trends, our management policy, business policies and sustainability initiatives with our suppliers. We hold briefing sessions for our suppliers to deepen their understanding of RBA Code of Conduct compliance, our E-COMPASS initiative, etc. We affirm the intent of the "Council on Promoting Partnership Building for Cultivating the Future" pursued by the Cabinet Office, the Ministry of Economy, Trade and Industry and the Small and Medium Enterprise Agency. We also announced the "Declaration of Partnership Building" to declare that we will work to build mutually beneficial relationships and new cooperation beyond scale and industrial groupings of the entire supply chain and to adhere to a desirable practice for trades with suppliers. We will continue to strive to improve added values in the supply chain by conducting global operations in cooperation with our suppliers.

World-class Manufacturing Operations

Production Innovation through Smart Manufacturing

We constantly strive to innovate in production and improve product quality and profitability at manufacturing sites and engage in the development of world-class manufacturing operations through the use of our knowledge and the data we have accumulated over many years.

Tokyo Electron Miyagi is implementing innovations in manufacturing, centered around the Miyagi Technology Innovation Center which began operations in October 2021. Specifically, we are promoting the construction of a Smart Manufacturing Line to manufacture products with consistent quality, while realizing reduced human effort and incidents.

By introducing an automated warehousing system and picking robots into our logistics process, we have increased our productivity by 30%. Going forward, our aim is to dramatically increase productivity by further evolving production technologies through the advancement of integrated innovation in the manufacturing and administrative support processes. We strive to realize and further promote Smart Manufacturing by reforming the manufacturing line as well as product design to create machine operated processes, and by obtaining, analyzing and utilizing various data from those machine operations.

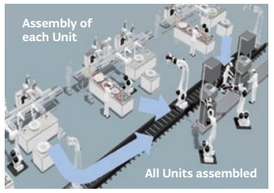


Image of the Smart Manufacturing Line


Automated Machine Evaluation at the Miyagi Technology Innovation Center

Standardization and Leveling

To realize our Medium- to Long-term Management Plan, we aim to further increase productivity through advancing standardization of components and the leveling production, which are important themes in each manufacturing process. Specifically, by revising the standards used when selecting different parts in each Group company, we will increase the proportion in which common parts are utilized for existing equipment and equipment to be developed in the future as ONE TEL. Furthermore, operational systems that rely on intuition and experience should be terminated, and we promote standardizing and making operations visible by meticulously organizing BOM[1], BOP[2] and master data in a database. In addition, productivity and procurement performance will be made visible through methods consistent throughout the Group by confirming database analysis techniques and evaluation standards.

Up to now, we had been carrying out various activities to fit optimal business models based on production systems for each product in each of the main manufacturing sites. Going forward, by realizing the standardization of components and leveling production, we aim to become a top-level global manufacturing plant while improving labor-saving and work-life balance.

1 BOM: Bill of Materials
2 BOP: Bill of Process

Basic Strategy According to Production Area

Best-in-class Research, Development, Production Capabilities

We strive to increase development and manufacturing sites. As semiconductor manufacturing becomes increasingly complex, keeping up with future technological innovation in semiconductors will be difficult using only conventional technologies and equipment. In addition to existing products, accelerated development of new products is also crucial.

For these reasons, following Tokyo Electron Technology Solutions (Yamanashi and Iwate), Tokyo Electron Miyagi and Tokyo Electron Kyushu (Kumamoto), TEL Manufacturing and Engineering of America in Minnesota, U.S.A. was designated as the fourth development and manufacturing site where we are pursuing activities that aim to establish plant functions at the same level as our domestic sites. Moreover, we own TEL Technology Center, America in New York, as a site for R&D and process integration, as well as Tokyo Electron America, located in California and Texas, which are hubs for semiconductor knowledge. By collecting and utilizing R&D information from these sites, TEL Manufacturing and Engineering of America strives to reduce lead time from development to production and deliver our equipment even faster to our customers.

As device manufacturing becomes increasingly complex and difficult, Shift Left has become even more important in recent years. At our company, we are strengthening existing products, creating new technologies that do not yet exist, and making efforts to quickly implement them into equipment. We will pursue best-in-class operations by building a comprehensive system from development to production in the United States in addition to Japan.


TEL Manufacturing and Engineering of America

Initiatives to Reduce Environmental Impact

To achieve net zero in 2040, we are proactively expanding our E-COMPASS[1] activities and implementing a variety of measures at our plants and offices as well as in logistics and the supply chain.

At each plant and office, we continue making energy usage visible, implementing energy efficiency measures and purchasing renewable energy (electricity). In logistics, we are actively implementing modal shifts[2] and packaging materials that reduce environmental impact. These initiatives were recognized and were selected for commendation by the Maritime Bureau Director of the Ministry of Land, Infrastructure, Transport and Tourism. The commendation comes as part of the 2022 Eco-ship Mark Certification program[3].

We also grant the "Environmental Partners" commendation to suppliers that cooperate in and contribute to our environmental efforts and certify them as "Green Partners."

1 E-COMPASS P. 52
2 Modal shift: Transitioning from transportation by car and air to rail and ship, which have lower environmental impacts
3 Sponsored by the Eco-ship Modal Shift Business Execution Committee

Initiatives in the Value Chain

Sales

We will build strong relationships of mutual trust with our customers by providing the Best Products, Best Technical Service to be their sole strategic partner. By leveraging our strength as a semiconductor production equipment manufacturer with a diverse product lineup and proposing optimal solutions, we will contribute to the creation of further value for our customers.

Key Themes for Medium- to Long-term Value Creation

- Improving our responsiveness to customers and customer satisfaction
- Increasing mutual profits by providing the Best Products, Best Technical Service
- Maintain and improve our position among our major customers

Management Resources to Be Invested

Intellectual capital	Intellectual capital	Social and relationship capital
A global sales and service system in which the Account Sales Division, the Global Sales Division, business units and overseas subsidiaries coordinate with one another	**Broad-ranging knowledge and comprehensive technological capabilities** born from our diverse product lineup	**Mutual trust with customers** built through many years of performance records

Differentiation Points

Co-creation with Customers

- Co-create future technology roadmaps with our customers
- Concurrent evaluation of technologies anticipating four generations and beyond in the future
- Technological development of Shift Left

Optimal Solutions

- Equipment for the four sequential key processes in the front-end process
- Provision of equipment geared toward the MAGIC* market, reengineered equipment, etc.
- Integration of front-end and back-end process technologies

Expansion into the Diversified Semiconductor Market P. 40

Global Operations

- Accurate and timely understanding of customer requests
- Developments by the Account Sales Division and Global Sales Division

Pursuit for Customer Satisfaction

- Sole strategic partner
- Company's own Customer Satisfaction Survey and improvement activities

Value Created

High-value-added products	Products and solutions	Responsiveness to customers
incorporating innovative technologies through concurrent evaluation of technologies anticipating four generations and beyond in the future	responding to a variety of applications	through close collaboration throughout the entire Group

Related Main Risks Risk Management P. 75-76

Risk 1	Risk 3	Risk 10
Market Fluctuations	Geopolitics	Information Security

Main Material Issue Initiatives in Sales

Development of Global Operations

We established the Account Sales Division and the Global Sales Division, and strive to swiftly offer the technology, services and solutions sought by our customers to be the sole strategic partner for our customers. In the Account Sales Division, the needs for next-generation leading-edge technologies in memory, logic devices, foundry and other fields are shared by major semiconductor manufacturers, who are our traditional customers, and the information from this is used for the R&D of new technologies. The Global Sales Division responds to the needs of domestic and overseas customers that handle products for the rapidly growing Chinese market and the industrial IoT market.

These two divisions work closely with business units, development and manufacturing divisions, service divisions and overseas subsidiaries to develop global operations throughout the Group as ONE TEL, enabling us to further strengthen our responsiveness to our customers.

Proposing Customer Solutions Leveraging a Wide Range of Product Lineup

We are expanding the wide range of our product lineup, including equipment for the four sequential key processes of deposition, coater/developer, etch and cleaning in the front-end process, as well as equipment for testing and bonding/debonding processes in the back-end process. By leveraging this product lineup in our proposal activities, we will solve customers' issues and contribute to the manufacturing of highly competitive semiconductors.

In the front-end process, we are undertaking the development of equipment with innovative and extreme processing performance, centered on (1) deposition systems that can handle new materials and structure while utilizing batch, semi-batch and single-wafer characteristics and allow optimal film thickness and film quality control, (2) coater/developers for leading-edge EUV lithography, (3) etch systems that achieve precision processing of fine structure and processing of deep holes and trenches with high selectivity, and (4) cleaning systems that remove particles and residues—which are causes of lower yields—without causing the collapse of fine patterns. Possessing equipment with four sequential key processes allows us to propose solutions for issues faced by customers from a variety of approaches, including process integration based on an understanding of upstream and downstream processes. Specific proposals include processing methods in the deposition and etch of hard masks necessary for the processing of ultra-fine patterns as well as proposals for cleaning methods according to the residues generated after deep-hole etching and deposition methods—including preprocessing—according to the surface state after cleaning.

Our Product Lineup

We also possess wafer probers used in wafer testing and bonder/debonder that realizes 3D packaging in the back-end process. In the future, there will be a demand for further improvements in the performance of semiconductors as well as scaling technology using cutting-edge nodes to improve the performance in generative AI services and expand the application range. To achieve this higher performance, the introduction of advanced packaging technology called Chiplet is accelerating, which combines individualized semiconductors. To meet these demands, we will proactively provide solutions for bonding processes necessary for both next-generation scaling technology and packaging technology, and introduce KGD* testing equipment, essential for Chiplet.

In addition to these measures, we strive to help customers improve productivity and quality in their development and manufacturing by providing optimal solutions that include remote support systems and software for maximizing equipment utilization rates. We are also continuously working to improve the performance of installed equipment to respond to customer requests for the manufacture of products that span multiple generations.

* KGD: Known Good Die. Semiconductor chips with guaranteed quality, including reliability

Expansion into the Diversified Semiconductor Market

In recent years, the semiconductor has been diversifying to meet the needs of various applications, such as the spread of virtual space due to digital technology, EVs and the autonomous driving level of automobiles as well as IoT and devices for communication represented by generative AI, which is driven by digital transformation (DX) and green transformation (GX). We define the diversified semiconductor market as MAGIC (Metaverse, Autonomous mobility, Green energy, IoT & Information, Communications) market, and are strengthening our business by leveraging our leading-edge technologies and experience based on our extensive installation record.

Each business unit within our company has continuously suggested functional revisions with a focus on customers in the 300mm equipment mature (legacy) node market until now. And, to meet further demands, we established the DSS (Diverse Systems and Solutions) BU and strive to continuously enhance corporate value by efficiently allocating management resources to the MAGIC market, which is expected to grow at a high rate in the future. We are working on a variety of functional developments with our customers by providing optimal equipment groups in anticipation of the shift to 200mm of SiC[1] processes and engaging in new technological development including the Waveguide[2] for the metaverse and dealing with μLEDs.

Furthermore, to respond to the diverse needs of our customers considering the use of existing equipment, we suggest options to increase the productivity of existing equipment and are expanding reengineered equipment that extend the lifecycles of 200mm equipment. In addition to the ALPHA-8SE™ i, UNITY™ Me+ and NS300+ 200mm Conversion currently on the market, we also began the sale of coater/developer reengineered equipment, the CLEAN TRACK™ Act™ 8Z in fiscal 2024.

1 SiC: a compound semiconductor material consisting of silicon (Si) and carbon (C)
2 Waveguide: a transmission line that communicates using light and is made of material with optical properties

Initiatives for Improvement of Customer Satisfaction

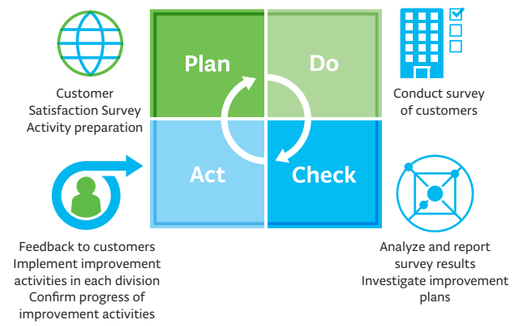
We are working to build solid relationships of mutual trust with customers by enhancing customer satisfaction, which we have valued highly since our founding. In the semiconductor production equipment industry, in which the speed of technological innovation is rapid, we co-create future technology roadmaps with the semiconductor manufacturers that are our customers, to promote the concurrent evaluation of technologies four generations into the future and beyond and accelerate the technological development of Shift Left. This allows us to offer highly competitive products that help improve customers' productivity by improving the yield rate of devices and maximizing equipment utilization rate.

Furthermore, at customer sites around the world, we are continuously implementing customer-oriented initiatives such as assigning our company engineers to quickly install equipment to operate at maximum performance, proposing solutions to any specific technical issue and providing feedback on next-generation equipment.

In addition to these activities, we conduct our own Customer Satisfaction Survey every year. The information obtained from this survey is analyzed by business unit (product), account (customer) and function (software, development, etc.), and the results are shared with relevant divisions, such as sales, equipment/plants and service, to develop a PDCA cycle that leads to practical improvements.

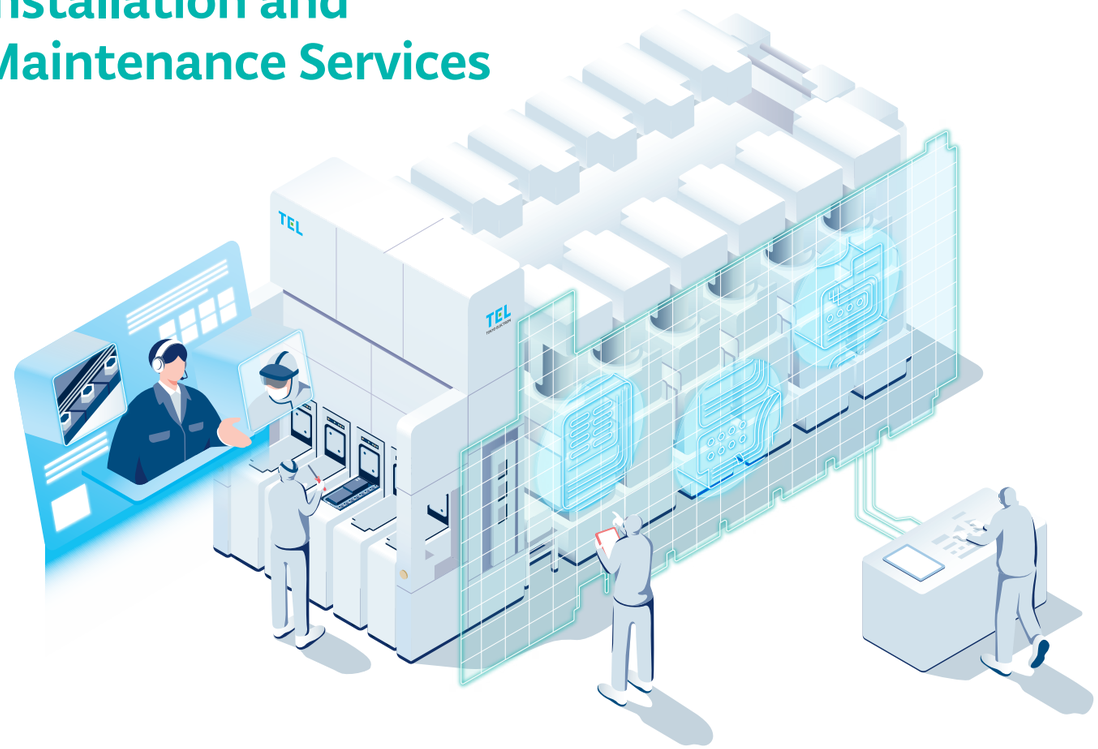
Our activities were highly evaluated and we received best awards consecutively from many of our customers in fiscal 2024. We will continue to provide the Best Products with innovative technology and Best Technical Service with high added value and strive to further improve customer satisfaction to be the sole strategic partner for our customers.

PDCA Cycle



Initiatives in the Value Chain

Installation and Maintenance Services



We make full use of leading-edge digital technology, knowledge management tools and offer the Best Technical Service with high added value to support the stable operation of various generations of equipment for a diverse range of applications. Taking advantage of our world's largest installed base, we are further improving the quality of our services by providing advanced field solutions that solve customers' issues.

Key Themes for Medium- to Long-term Value Creation

- Improving customer satisfaction through the provision of high-value-added services
- Maximizing service revenues through expanded sales of services such as comprehensive contract-based services
- Pursuing high-quality and highly efficient services that make full use of digital technologies

Management Resources to Be Invested

Intellectual capital	Intellectual capital	Human capital
Service support infrastructure at **87 sites located in 19 countries and regions** of the world	**Service database and remote support system** that utilizes digital technologies, knowledge management etc.	**Approximately 5,300** field engineers with highly specialized and broad knowledge

Differentiation Points

Field Engineer

- Prompt and efficient service by field engineers who work on a global scale
- Continuing skills improvement programs for engineers

Efficiency through DX

- Development of Service CRM* that centrally manages operation history
- Provide advanced field solutions through the use of remote maintenance services and remote support tools

* Service CRM: Service Customer Relationship Management

Installed Base

- Utilization of equipment data from the world's largest installed base
- Relationship of absolute trust with customers based on our reliable technical services

Equipment Life Cycle

- Support for ongoing equipment operation
- Initiatives for reducing environmental impact

Value Created

Comprehensive services	Contribution toward the long-term steady operation of equipment	High-quality technical services
resulting from global expansion that include everything from equipment installation to maintenance	across many generations	contributing to improving customers' productivity

Related Main Risks Risk Management P. 75-76

Risk 5	Risk 6	Risk 11
Safety	Quality	Human Resources

Main Material Issue Initiatives in Installation and Maintenance Services

Globalize Field Engineers and Strengthen Customer Responsiveness

Amid the expectation for rapid expansion of the scale of business, going forward, it is extremely important to increase field engineers, develop people that can promptly play an active role as well as effectively improve the skills of existing field engineers.

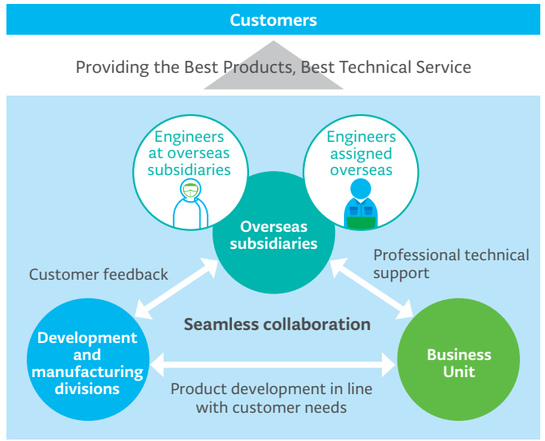
Our company establishes a Group-wide common skills management system that meets the standards of Semiconductor Equipment and Materials International (SEMI) and plans to upgrade skills according to the detailed goals established every year. The system helps us to improve the quality of the services we deliver to customers, by enabling the optimized deployment of human resources that utilize information about engineers' skills which have been managed in this manner.

Furthermore, we are expanding our program to reassign engineers who had undergone training at manufacturing sites in Japan for a fixed period to the field after their return to their companies, as part of our education for expert engineers for overseas subsidiaries. By participating in this program, engineers can not only deepen their understanding of equipment technology but can further improve their communication skills with engineers in the development and manufacturing divisions and business units. In addition, we offer high quality technical support that incorporates customer needs and implement programs to develop leaders in the field who can play an active role globally using high level skills.

In our equipment training geared toward our customers and our company engineers, we have established an environment where even more engineers can take courses by centrally managing information, such as training machines, instructor schedules and a record of training requests to courses taken, in a dedicated system.

We have also assigned engineers to our customers' onsite operations, and created a system where those engineers can be efficiently dispatched to where they are needed, regardless of country. We are proceeding with innovations to effectively implement education that is provided at the optimal time and short in duration, in which the whole structure is transparent, while promptly confirming the certifications and educational situations of our dispatched engineers to ensure high quality service.

In addition, we are undergoing renewals and expansion at each of our service sites and creating an environment where we can provide quick and efficient support to match the needs of our customers.



Support Services that Extend the Life Cycle of Equipment

As part of our efforts to have our customers use our equipment over a long period of time, we provide LEAP*, a support service that extends the life cycle of our equipment. Support for semiconductor production equipment typically ends seven to eight years after discontinuation of equipment due to the discontinuation of parts or the difficulty in maintaining safety and quality. For this reason, equipment for which support has ended is discarded and replaced with succeeding equipment. We now provide support service that makes the extension of the life cycle of equipment whose production was discontinued over 15 years ago possible by redesigning discontinued parts and restructuring and strengthening our support system including repairs.

We support customers who have difficulty with replacement with newer equipment due to restrictions on change management of equipment specifications or operations, or who hope to continue using their equipment. Through this support, while implementing initiatives that reduce equipment disposal and environmental impact, we contribute to the continuous operation of customers' equipment over a long period of time.

* LEAP: Lifecycle Extension and Availability Program

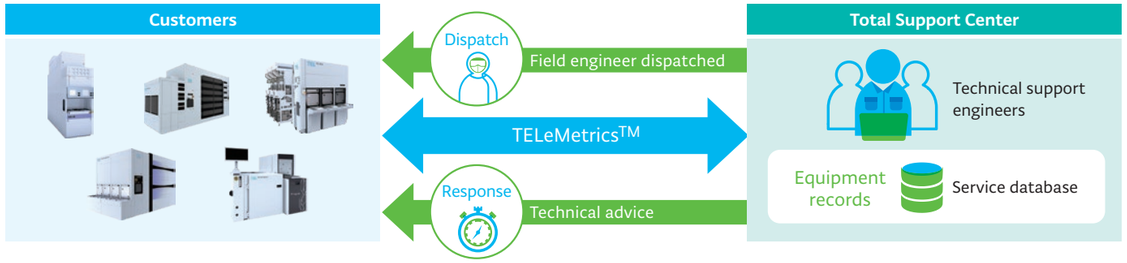
Promotion of High-value-added Services

We have built a global support system by highly specialized engineers, establishing Total Support Centers (TSCs) in Japan, the United States, China and Europe.

By accumulating large amounts of operation history, such as equipment support in everyday activities in Service CRM, which is centrally managed globally, as well as creating equipment records and building troubleshooting search tools as knowledge management activities, TSC and onsite field engineers use these tools to provide prompt and high-quality services to our customers. We are also developing a system that centrally manages internal operation procedures created by field engineers onsite to improve the efficiency of procedure creation, quality, and searchability of operation procedures, and are preparing to roll them out globally. In addition, we strive to resolve our customers' various issues through the use of TELeMetrics™, a remote maintenance service, and remote support tools.

Our company provides several contractual services for the stable operation of equipment, such as services in which our field engineers are stationed at customers' manufacturing sites to maintain their equipment, as well as a comprehensive contractual service (TEL Service Advantage Premium) in which we offer pay-as-you-go or flat-rate maintenance services, supply maintenance/consumable parts and repairs in an integrated manner.

Furthermore, to shorten trouble resolution time and stabilize process performance, we aggregate and analyze data output from equipment, predict the timing of failure of major parts and suggest replacements in advance so that we can continually implement activities that lead to improved equipment utilization rates.

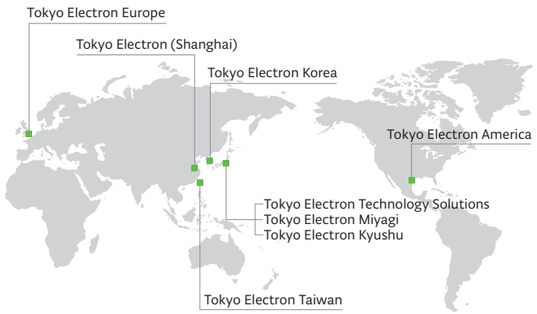


Global Expansion of Training for Customers

We establish training centers all over the world, mainly at our development and production sites, and provide global training to customers on equipment operation and maintenance so that products can be used safely. With our customers' safety as the priority, we conduct effective training using remote learning and training videos, while flexibly dealing with changes in circumstances.

Going forward, we will strive to further enhance our training environments, including continuously expanding training equipment lineup and updating the training centers of our overseas subsidiaries.

Main Training Sites for Customers



(as of April 1, 2024)

Sustainability Initiatives in the Value Chain

Our approach to sustainability initiatives is to practice our Corporate Philosophy through realizing our Vision. We conduct activities for sustainability initiatives that we have organized into the following four frameworks: Governance, Strategy, Risk Management, and Metrics and Targets.

Main Initiatives in the Four Frameworks

Governance

- Corporate Sustainability Management Department established at headquarters and the sustainability initiatives are promoted throughout the entire Group
- Meetings of the Sustainability Committee, chaired by the executive officer in charge of sustainability, are held twice a year. Corporate Officers, Division Officers and presidents of domestic Group companies and overseas subsidiaries attend the meetings to set short-, medium- to long-term sustainability goals, manage progress, formulate sustainability-related policies and discuss individual themes. Decisions on important matters are made at Corporate Officers Meetings, the highest decision-making body on the executive side
- Group-wide sustainability initiatives are reported on as necessary at meetings of the Board of Directors, and the Board of Directors supervises those initiatives

Strategy

- Focus on the creation of social and economic value of business activities based on the idea of TSV (TEL's Shared Value), which is the same as CSV, to solve social issues using our unique corporate resources and expertise
- Identify key items to be worked on with priority as material issues* and develop the value chain through business activities anchored around material issues while leveraging the strengths built by the driving forces of growth behind our company
- While implementing a range of sustainability initiatives through business activities, contribute to solving issues in industry and society and achieving the SDGs by providing the Best Products with innovative technology, and the Best Technical Service with high added value, and achieve medium- to long-term profit expansion and continuous corporate value enhancement

* Material issues were revised in fiscal 2024 Material Issues P. 13-14

Risk Management*

- Respond appropriately and promptly to a diverse range of risks related to semiconductors, including geopolitics and market changes, develop a risk management structure for achieving sustainable growth, and carry out enterprise risk management to promote more effective activities
- In addition to minimizing the impact of risks, that may be faced when conducting business, by giving them full consideration from a future perspective, also view them as business opportunities and appropriately address them
- Uncover Group-wide comprehensive risks, identify high-impact and high-probability risks as material risks for the Company, and appoint a risk owner for each risk. Focus on risks that are particular issues in meetings of the CEO and Division Officers, confirm status of related initiates and discuss improvement measures

* Risk Management P. 75-76

Metrics and Targets

- Set key indicators for continuous corporate value enhancement[1] in our Medium-term Management Plan and annual sustainability goals[2]
- The results and status of the achievement of key indicators and annual goals are reviewed regularly at the review meeting
- Conduct activities to achieve each indicator and goal under the persons responsible for each indicator and goal

1 Key Indicators for Continuous Corporate Value Enhancement P. 17-20
2 "Sustainability goals and results" on our website www.tel.com/sustainability/goals-and-results/index.html

Human Resources

Our Corporate Growth Is Enabled by People, and Our Employees Both Create and Fulfill Company Values

We believe that our corporate growth is enabled by people, and our employees both create and fulfill company values. Based on this approach, we provide many opportunities for employees to challenge themselves to achieve high-level goals by making the most of their individual potential. Of particular importance in our human resource management are the TEL Values, motivation-oriented management, and diversity, equity and inclusion.

TEL Values as a Code of Conduct	Motivation-oriented Management	Diversity, Equity and Inclusion
		3G Global, Gender, Generation

TEL Values P. 5-6

We looked back at Tokyo Electron's values accumulated since our founding and what it means to be Tokyo Electron. We summarized what we hope to honor in the future as TEL Values. The five TEL Values — pride, challenge, ownership, teamwork and awareness — represent our fundamental approach for management and employees to work together as one to flexibly and rapidly respond to environmental change and to fully harness our potential. We conduct a range of activities to promote awareness of TEL Values, including messages from the CEO and other members of management, and sharing interviews with employees who both experience and embody TEL Values in their daily work. Through these initiatives, we communicate the importance of our employees taking on new challenges without fear of failure, and of various departments and each Group company collaborating to address issues. In our new employee training, we also encourage the understanding and practice of TEL Values upon entry into our company. We do this in a number of ways, including lecture from management, formulation of action plans through group work, and discussions upon defining one's own strengths and distinctive qualities as My Values. The TEL Values are an important set of values that we intend to pass down to future generations, and our employees around the world work hard to put these values into practice.

Motivation-oriented Management

We operate in 87 sites in 19 countries and regions, globally. We believe it is important for human resources with different cultural backgrounds, experiences and attributes to share values and work together as one toward value creation. We believe that each of our employees, maintaining a high level of engagement and demonstrating their full potential, will lead directly to our growth as a company. Accordingly, we practice motivation-oriented management. Specifically, we are implementing important measures in line with the following five points.

Five Points for Motivation-oriented Management

1. Awareness that our company and work contributes to the development of industry and society
2. Dreams and expectations of the Company's future
3. Opportunities to take on challenges
4. Fair evaluations that recognize employee efforts and globally competitive rewards
5. Workplace with an open atmosphere and positive communication

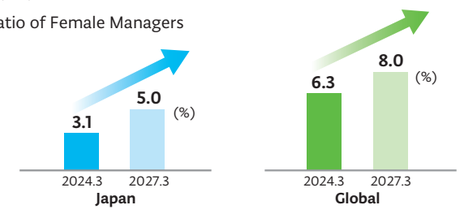
As examples of important measures, we are operating a common global job-based grading system (GTC: Global TEL Career-paths) and clarifying career paths for Individual Contributors (ICs) (TCL: Technical Career Ladder), as well as adopting a performance management system for promoting employee growth and performance enhancement. In these and other ways, we are developing human resource systems for surviving in the middle of global competition, creating opportunities for employees to take on challenges, and actively supporting career development.

Diversity, Equity and Inclusion (DE&I)

With the strong commitment of managements, we actively promote DE&I as one of management pillars that leads to the continuous generation of innovation and increased corporate value. Based on the idea that "ONE TEL, DIFFERENT TOGETHER™" with 3G (Global, Gender, Generation), we have taken on nationality, gender and generation as major themes. Each Group company is implementing various initiatives, such as setting the following goals.

- To enable employees with diverse experiences from around the world (ratio of domestic employees to overseas employees is 55:45) to play an active part, we promote career development and personnel exchange across countries and regions based on a common global human resources system
- Conduct a gender diversity-conscious talent pipeline (plan for developing human resources) for succession planning and achieve the target of increasing the ratio of female managers[1] to 5.0% in Japan and 8.0% globally (by fiscal 2027). Set further future target values upon based on the shifting ratio of female employees

Ratio of Female Managers



- Taking into consideration that many of our employees are engineers, we actively invest in the use of recruiters and employer branding to hire female engineers at a level that is equal to or greater than the general ratio of female engineers[2] in each region
- We plan to hire a total of 10,000 employees globally through new graduates and mid-career hires over the next five years. In addition, in Japan, we revised a post-retirement reemployment system that allow employees to utilize the experience, knowledge and skills they acquired in the Group. Through such initiatives, we will revitalize the organization so that employees over a wide range of generations can maximize their capabilities
- In 2020, we began the "Diversity, Equity and Inclusion Talk (DE&I Talk)" with TEL's project leaders and external experts. We create networking opportunities for employees with similar characteristics and experiences, and hold roundtable discussions about careers before and after taking maternity/paternity leave and childcare leave

1 Include individual contributors and employees reemployed after retirement
2 The ratio of females majoring in science or engineering

"Diversity, Equity and Inclusion Week (DE&I Week)"

In January 2024, we expanded the scale of the DE&I Talk we had been holding until then and held DE&I Week for Group employees around the world. Specifically, we held a total of 15 events dealing with DE&I from a variety of angles, such as training using VR where employees experienced "If I were in that position, how would I feel and what would I think?" to promote the understanding of DE&I, a conference for women engineers, an event promoting paternity leave and talks about topics such as unconscious bias*. Through participation in such events, we promote DE&I throughout the entire Group to deepen employees' interest and understanding of DE&I with "ONE TEL, DIFFERENT TOGETHER™" as our slogan.

* Unconscious bias: Unconscious prejudice. Distortions and partiality regarding how one perceives and interprets things that the person themself is unaware of.

Major DE&I Activities

As a global, borderless company, we are implementing various initiatives as detailed below to leverage the strengths of our diverse human resources and create well-balanced systems and teams.

- By creating and publishing reports on the DE&I activities in all of our Group companies, including overseas subsidiaries, we make the activities of each site more visible. We also communicate internally and externally through an internal newsletter, intranet, social media and other channels

- We newly launched "DE&I" within our external website in 2024. Under the idea of "ONE TEL, DIFFERENT TOGETHER™", we introduce activities that actively promote DE&I, consisting of four focus areas, including Diverse Work Styles in addition to the 3Gs
- Hold Career Design Seminars for Female employees. With voluntary attendance of about 160 employees, participants acquire basic knowledge of such things as self-leadership skills for independent career planning. Participants explore their career potential at us by learning self-centered career design and personal strength-based leadership, etc.
- Employees have participated in NPO J-Win[1] programs since 2021. By meeting role models and aiming for career advancement through activities with members of other companies in external environments with high levels of diversity, the programs help participants increase their willingness to take on the challenge of positions in management or senior director and above[2]
- We continuously support the Employee Resource Group (ERG) to create networking opportunities for employees with similar characteristics and experiences
- An LGBTQ+ helpline was established in April 2021, and a congratulations and condolences system that includes same-gender partners was adopted from October 1, 2022. The aim is to improve and expand systems and facilities going forward to ensure ongoing development of workplaces where everyone, not just the people concerned, can work with enthusiasm and energy
- New graduates and mid-career recruits are continually employed on the basis of whether they will work actively at us, regardless of gender, nationality, generation or other characteristic, by considering such aspects as their expertise, experience, and expectations for their future

1 NPO J-Win: Japan Women's Innovative Network was established in April 2007 as a corporate member-based organization with the aim of supporting the promotion and establishment of diversity management in companies.
2 Employees of a certain level or position based on the global human resources system

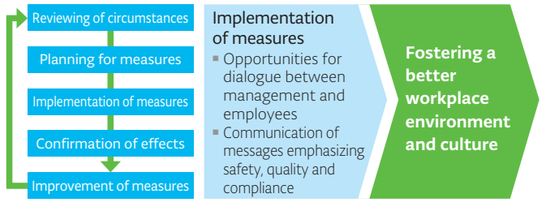
Employee Engagement

Improving employee engagement is essential to maximize corporate performance and achieve sustainable growth. Recognizing that employees both create and fulfill company values for us, we have been regularly conducting engagement surveys since fiscal 2016 to assess the current state of employee engagement and identify issues.

In the survey implemented in fiscal 2023, employee engagement scores improved by 18 points in nearly all Group companies in Japan and overseas subsidiaries between fiscal 2016 and fiscal 2023. Based on the results of these surveys and on employee feedback, we endeavor to establish better workplace environments and are working to foster a better corporate culture that empowers all our employees to maximize their individual abilities in an open-minded environment, to engage energetically with their work and to participate in constructive discussions and exchanges of opinions. Specifically, we implement information sharing by holding all hands meetings so that management can incorporate opinions from onsite employees, hold discussions between both management and employees in the entire Group as a whole and strive for revitalized communication. Furthermore, we pursue strengthening and improving the foundations of management by promoting further improvements in operational efficiency through enhanced work-life balance and digital transformation as well as initiatives related to safety, quality and compliance.

Due to these results, our employee retention rate* reached extremely high levels and in fiscal 2024, was 97.5% globally and 98.8% in Japan. Going forward, we will continuously and efficiently implement various activities.

* Calculated using data on turnover rate



Developing Human Resources

Our company is engaged with the development of human resources that can play an active role on the global stage amid rapidly changing business environments. To maximize the performance of each employee, we place importance on our employees' motivation and are globally developing human resources strategies so that the company and our employees can both continue to grow.

In 2023, with the aim of contributing to the development of individuals capable of leading the technological innovation in semiconductors, we participated in the U.S.-Japan University Partnership for Workforce Advancement and Research & Development in Semiconductors (UPWARDS) for the future.

The Overview of TEL UNIVERSITY

	New Graduates, Junior Employees	Mid-level Employees	Managerial Employees, Individual Contributors (ICs), and Officers	Top Management
Level-based Programs	Introductory programs (new graduates, mid-career recruits)			
	OJT programs (new graduates, mid-career recruits)			
	Junior employee programs	Mid-level employee programs	Manager programs	
			Leader programs	
Goal-based Programs	Technical programs (seminars, workshops)			
	Business skills			
	Global communication			
	Career support			
	Compulsory web-based training			

TEL UNIVERSITY is our company's internal educational institution established in 2007, which fosters a culture of learning and provides opportunities for self-growth for each individual employee. Through TEL UNIVERSITY, we implement the following initiatives for the development of human resources, which are indispensable for the future development of our company.

TEL UNIVERSITY

TEL Principles of Human Resource Development

1. Self-motivation and a sense of responsibility are the basic requirements for developing the talents of employees.
2. The workplace supports employee development.
3. The company provides employees with opportunities and incentives to learn and must build the necessary platform or framework.

Global and On-demand Learning

Since all employees grow in different ways, we provide on-demand education that enables employees to learn what they want, when they want. In response to the diverse ways in which people work, we actively utilize online and remote training to provide a common platform for learning in any location in the world.

Support for Career Development

We are expanding our programs to help employees quickly acquire basic skills based on the level and goals of the employee through the global human resources system. We also provide information and tools so that employees can gain a more concrete image of their own career development by learning and building on their experience.

Leader Programs

We identify the next generation of future leaders early on and provides systematic training. Through this, we aim to enhance corporate value in the medium- to long-term. The next generation of potential future leaders are provided with opportunities to build networks and develop broader perspectives through participation in external training and receiving 360-degree feedback*. The management, including outside directors, also engages in consideration and reviews concerning the systematic assignment of these potential leaders.

We also work to promote human resources development cycles at our business sites; for the managerial employees for potential future leaders, we provide level-based training for various duties, with the goal of improving their skills in a practical manner.

* 360-degree feedback: Process for collecting feedback from the subordinates, peers and supervisors of employees, as well as self-assessments by the employees themselves

Work-life Balance

Leave System

We believe that employees are high productivity when they can properly manage their work hours and take leave. Accordingly, we are working to eliminate long working hours, and to both enhance our leave systems and encourage employees to make use of them. We have set a medium-term target of ensuring that our employees take 80%[1] or more of the paid leave available to them. To this end, we educate employees on how to take leave in a systematic manner, regularly monitor how much leave employees have available and encourage management styles aimed at improving leave usage rates. In fiscal 2024, the rate of employees taking advantage of paid leave was 80%, achieving our medium-term target.

We also operate a unique "refreshment leave system" in different countries around the world, depending on the prevailing circumstances. This system aims to provide both mental and physical refreshment for employees, and so boost their motivation to work. In Japan, employees who have worked at the company for 10 years or more are granted special, supplementary paid leave of between two weeks and one month for every five years of continuous service. In fiscal 2024, 630 employees in Japan and 827 employees overseas took advantage of refreshment paid leave. We are also working to establish various other leave systems for different life events, including childcare leave, leave to care for a sick or injured child, childcare support leave[2] and paid leave to provide nursing care. Employees are permitted to extend childcare leave until the day the child reaches three years of age; employees are now also eligible for the reduced working-hours program for childcare until the child graduates from elementary school[1].

Refreshment leave
1,457
employees
(Global)

1 Usage for employees in Japan
2 Leave to care for a sick or injured child: Employees are granted five days of paid leave per year until the child enters elementary school; childcare support leave: employees are granted five days of unpaid leave per year until the child enters junior high school

Health and Productivity Management

For our company to continue to grow, it is important that every employee leads a fulfilling life and maximizes their performance. We strive to create a healthy and safe work environment and our approaches were summarized in the "Declaration of Health[1]" in 2012. We built an effective health management system under the direction of executives in charge of human resources by assigning occupational health physicians and public health nurses in each plant and office.

Specific initiatives concerning health are, in addition to conducting various medical checkups in accordance with the law, offering face-to-face consultations by designated occupational health physicians for employees who work long hours. We also offer counseling opportunities supported by external industrial counselors for those who request them. Furthermore, we organize regular line-care[2] seminars aimed at management, and where necessary, hold liaison meetings with the health officers and health professionals at each Group company in Japan.

Based on the collaborative health[3] concept, in cooperation with the Tokyo Electron Health Insurance Society, we are actively expanding data health[4] initiatives, providing employees health guidance and effective prevention and health promotion according to their individual circumstances while utilizing the examination data from medical checkups.

As a result of these efforts, the entire Group in Japan collectively received recognition as a top 500 company under the 2024 Certified Health & Productivity Management Outstanding Organizations Recognition Program[5] for the fifth consecutive year from fiscal 2020.

Going forward, from the perspective of well-being[6], we will promote the provision of an environment that is mindful of health so that employees can actively engage in their responsibilities with a sense of purpose and work with enthusiasm.

1 Declaration of Health: Promoting various initiatives in response to health issues from the perspectives of eating, resting, walking and talking
2 Line-care: Measure for mental health, in which managers and supervisors be mindful of and care for the mental health of their subordinates and team members
3 Collaborative health: Situation where a company actively cooperates with an insurer, such as a health insurance society, to effectively and efficiently promote the health of its employees and their families
4 Data health: Refers to a more effective and efficient health care program that is implemented in line with the health status of insured persons, by utilizing and analyzing the health and medical information held electronically by the medical insurer
5 Certified Health & Productivity Management Outstanding Organizations Recognition Program: The program publicly recognizes particularly outstanding organizations that are practicing health-oriented business management, based on initiatives attuned to local health-related challenges and on health-promotion initiatives led by the Nippon Kenko Kaigi.
6 Well-being: Being in a completely good state physically, psychologically and socially

Human Rights

Approach to Human Rights

As the activities of companies expand worldwide, human rights issues are getting serious in society. We believe it is important to eliminate human rights issues throughout the entire supply chain, including us, and to engage in sustainable business activities.

We are conscious of our corporate social responsibility, and we recognize that it is important to conduct ourselves with ethical behavior. We have firmly upheld human rights since our founding, as reflected in the spirit of our Corporate Philosophy and Management Policies. For us, respecting human rights is a significant undertaking, consisting not only of eliminating the adverse impacts of our business activities on human rights, but also of respecting everyone who supports our business activities and contributing to the realization of a sustainable, dream-inspiring society. We incorporate the concept of respect into every aspect of our business activities, and strive to nurture a dynamic corporate culture where each person can realize their full potential.

Human Rights Policy and Promotion Framework

We formulated a Human Rights Policy[1], referring to the United Nations' Guiding Principles on Business and Human Rights and the International Bill of Human Rights and the ILO Declaration on Fundamental Principles and Rights at Work referred to therein, the Ten Principles of the United Nations Global Compact and the RBA Code of Conduct[2]. Our Human Rights Policy specifies five focus areas: Freedom, Equality & Non-Discrimination; Freely Chosen Employment; Product Safety & Workplace Health and Safety; Freedom of Association; and Appropriate Working Hours & Breaks/ Holidays/Vacations. We thoroughly familiarize our executives and employees with the Policy and we demand that our suppliers also conduct their business activities in line with our Policy. We engage in active dialogue with all of our stakeholders, such as shareholders, investors and suppliers, striving to meet the demands and expectations of society. We also increase human rights awareness through internal online training and briefings for suppliers. Through this, we are promoting more effective protection of human rights.

Our Corporate Sustainability Management Department leads the promotion of human rights initiatives and important issues are deliberated by the Sustainability Committee and approved at the Corporate Officers Meeting attended by the CEO. The executive officers in charge of sustainability report on the status of important human rights-related issues, the results of initiatives and the like at Board of Directors meetings, and the Board supervises these efforts.

Initiatives Which Align with the United Nations' Guiding Principles on Business and Human Rights

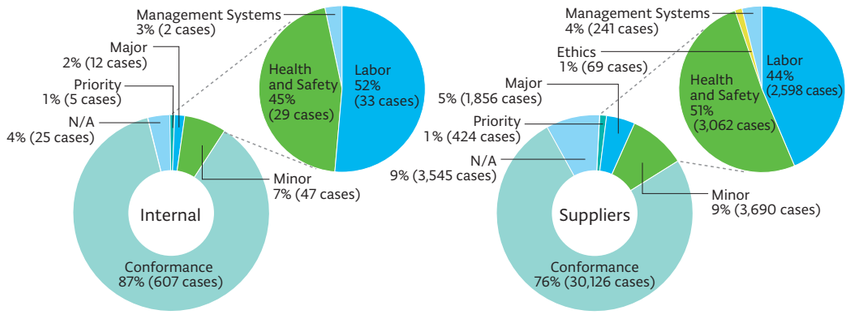
1 "Human Rights" on our website
www.tel.com/sustainability/management-foundation/human-rights/index.html
2 RBA Code of Conduct: A set of standards established by the Responsible Business Alliance (RBA) for supply chains in the electronics industry, to ensure that labor environments are safe, that workers are treated with respect and dignity, and that companies take responsibility for the environmental impacts of manufacturing processes and procurement.

Human Rights Due Diligence

We actively conduct human rights due diligence annually to identify the adverse human rights impact (human rights risks) of the entire supply chain, take corrective actions and track the effectiveness of their response.

In fiscal 2024, we conducted a survey based on RBA auditing standards of 12 Group companies in Japan and overseas and approximately 690 suppliers involved in materials, staffing, customs clearance, packaging, etc. Consequently, "policies and procedures," "working hours and consecutive working days," "evacuation drills," "first aid" and "complaint-handling mechanism" were identified as high priority human rights risks. Various corrective actions are being implemented to reduce these risks throughout the supply chain. Furthermore, of the high priority human rights risks identified in fiscal 2023, the issue of "retention of personal identification documents by the company" was addressed by returning pension booklets to employees, and other improvements were made to "policies and procedures," "first aid" and other risks. We verified the effectiveness of these corrective actions. We are currently verifying the effectiveness of other corrective actions with some issues requiring further improvements.

Study Results for Fiscal 2024*



Our classifications and definitions of conformance as well as human rights risks based on RBA auditing standards are as follows.
Priority: Issues considered particularly serious, which are at significant risk and require immediate priority remediation
Major: High-urgency issues which are at significant risk and require immediate remediation
Minor: Minor issues and risks recognized in each area which require remediation
Conformance: No issues were recognized in each area and requirements are being met
N/A: Indicates that the respondent answered that "the question is not applicable."

* Percentages may not add up to 100 because they have been rounded.

Human Rights Due Diligence Steps

Identify adverse human rights impact ▶ Prevent/mitigate adverse human rights impact ▶ Track the effectiveness ▶ Provide information and communicate with outside parties

High Priority Human Rights Risks, Corrective Actions, and Status of Improvements

* Improvements Status ○: Significant improvements made △: Some issues remain

Human Rights Risk	Main Issues	Internal	Suppliers	Corrective Actions	Improvements Status*
Labor					
Policies and procedures • Forced labor/bonded labor • Child labor • Pay reduction as disciplinary sanction • Religious practices • Freedom of association	• Policies and procedures are insufficiently defined • Programs for measuring effectiveness have not been implemented • Policies and procedures are not available in languages that can be understood by foreign laborers • Employees are not made sufficiently aware of policies or procedures		✔	Suppliers • Disseminate the Tokyo Electron Group Human Rights Policy • Hold briefings regarding the contents of RBA demands • Formulate policies and procedures and translate them into multiple languages • Internal dissemination	○
Working hours and consecutive working days	• Excessive working hours • Excessive consecutive working days	✔	✔	Internal • Disseminate the working hours/days • Regularly monitoring to call for attention and confirm effectiveness Suppliers • Weekly working hours management • Regularly monitoring to call for attention and confirm effectiveness	△
Health and Safety					
Evacuation drills	• Less than 100% of employees take part • Drills are not performed after sunset	✔	✔	Internal/suppliers • Define procedures • Conduct drills and follow up with people who do not participate in them • Plan and conduct drills after sunset • Create and manage drill implementation records, Organize and share information regarding problems	△
First aid	• First aid procedures have not been defined • There aren't enough first aid personnel		✔	Suppliers • Define procedures • Assign an appropriate number of first aid personnel	○
Management Systems					
Grievance mechanism	• Grievance mechanisms are not available in languages that can be understood by foreign laborers • Employees are not made sufficiently aware of the grievance mechanisms		✔	Suppliers • Multilingual support • Internal dissemination	△

Addressing Grievances

We recognize the importance of addressing the harm caused by human rights violations swiftly and appropriately, so we make active efforts to address grievances. We have developed grievance mechanisms that are able to reliably address grievances by leveraging our Internal Reporting System, which is available to all stakeholders.

One specific measure we have taken is to request corrective actions of suppliers who we have confirmed to have failed to comply with requirements regarding the bearing of employees' employment-related expenses in fiscal 2024.

Going forward, we will proactively roll out human rights-related initiatives based on a high level of ethics, and will continue working to mitigate human rights risks and address grievances within ourselves and across the entire supply chain.

Environment

E-COMPASS

As an industry leader, we are rolling out the E-COMPASS (Environmental Co-Creation by Material, Process and Subcomponent Solutions) environment-focused initiative. Through E-COMPASS, we will work together with our customers and partner companies to promote semiconductor technological innovation and reduce the environmental impact of semiconductors through our business activities, centering on the three perspectives of semiconductors, production equipment, and business activities. We will supply products and services with technological and social value through our entire supply chain, led by E-COMPASS, and will link this to sustainable growth.

E-COMPASS
Environmental Co-Creation by Material, Process and Subcomponent Solutions

Semiconductors	Production equipment	Business activities
Pursuing higher device performance and lower power consumption	Achieving both high process and environmental performance	Reduction of CO_2 and equivalent emissions in all business activities

Initiatives with Suppliers

We believe we must further accelerate our efforts to preserve the global environment and the data-driven society, which will be a growing reality in the years ahead. To reinforce our partnerships with our suppliers, in March 2024, we held "TEL E-COMPASS Day 2024", a briefing session with all of our suppliers. At this briefing session, which was held using a hybrid approach, both online and in-person, we shared information about the progress we have made in our E-COMPASS activities and our net zero efforts. We also provided detailed explanations of environmentally-focused training materials, support plans, and more. This session, the third of its type, was attended by roughly 900 suppliers, of which roughly 70 attended in person, engaging in lively exchanges of information.

In December 2023, we awarded three of our suppliers the status of Environmental Partners at "TEL Partners' Day", in recognition of their tremendous cooperation with the activities of E-COMPASS. In April 2024, we also conducted the "E-COMPASS Survey" to confirm matters including the state of suppliers' eco-friendliness with respect to the products they carry, the status of their products' compliance with environmental laws and regulations, activities for reducing the environmental burden of their operations and more. Based on the results of the survey, in September, we plan to certify suppliers with an exceptional level of compliance with environmental laws and regulations and who are conducting excellent CO_2 emission reduction activities as Green Partners as an expression of our feelings of respect and gratitude.

Achieving net zero* by 2040 will require not only reductions in CO_2 emissions within Tokyo Electron but also cooperation in reducing emissions by our customers' and suppliers' production lines. We are engaging in discussions with some of our suppliers and fleshing out measures achieving these goals. We are also assigning persons in charge of net zero initiatives at each of our manufacturing sites and developing our internal systems. We will work proactively to preserve the global environment across the entire supply chain through our partnerships with customers and suppliers.

* Achievement of net zero greenhouse gas emissions from Group activities (Scopes 1 & 2) and from activities outside the Group (Scope 3) by 2040

Environmental Management System

Environmental measures are growing even more crucial. We have established an Environment Promotion Department in our headquarters, headed by our corporate director in charge of the environment. This department oversees multiple boards to promote efforts to address medium- to long-term environmental issues throughout the Group. We also issue reports on the state of progress of these initiatives to management, including the CEO, through the framework of councils set out in Table 1.

In accordance with the ISO 14001 certification that the entire Group (mainly our manufacturing subsidiaries) obtained in March 2017, we have identified environmental impact assessments and useful environmental aspects within this standard, and are executing a standardized group format for environmental management programs and internal audit checklists. To ensure compliance with the environmental laws and regulations of various countries, which undergo frequent revisions, we are making efforts to gather information regarding PFAS*-related regulations at earlier stages and taking a proactive stance towards compliance. We were once again free from environmental incidents, violations and legal proceedings in fiscal 2024.

* PFAS: Per and Poly Fluoroalkyl Substances. This is the collective term for perfluoroalkyl and polyfluoroalkyl compounds, a subset of organic fluorine compounds.

Table 1

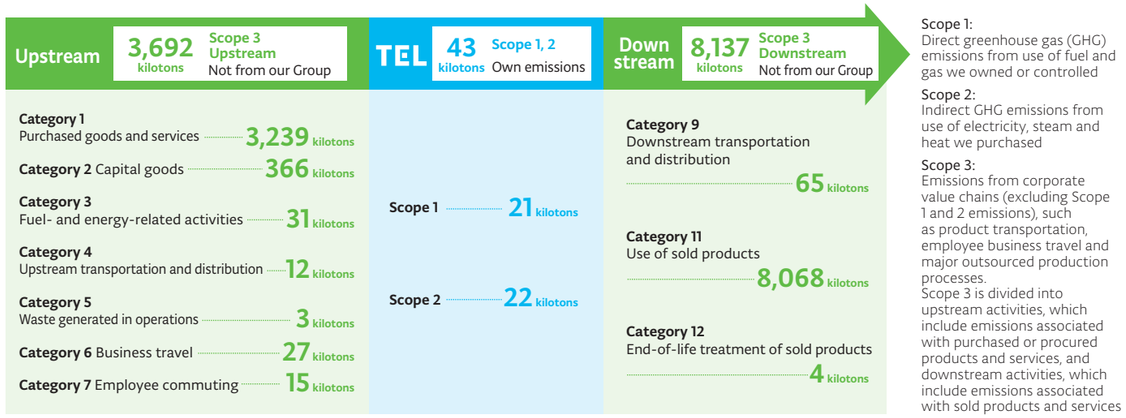
Conference Name	Main Participants	Function	Meeting Frequency
Council for the Regular Reporting of Environmental Activities	CEO, Corporate Officer, manufacturing companies president, corporate director in charge of the environment	Report on matters discussed at the Global Environment Council and the TEL Corporate Environment Council and review items for approval	Quarterly
Manufacturing Companies Presidents' Council*	Manufacturing companies president, corporate director in charge of the environment, etc.	Monitor and supervise progress related to environmental issues	Quarterly
TEL Corporate Environment Council	The GMs in charge of the environment and vice presidents of department, etc.	The promotion of environmental activities across the entire Group, set company-wide goals	Appropriately
Global Environment Council	Appointed members by the executives at headquarters and the Group companies	Set individual goals related to environmental issues, monitor progress, work to achieve our goals	Twice annually

* At the Manufacturing Companies Presidents' Council, information is shared on business affairs and issues regarding environment, safety, quality, supply chain management, etc.

CO_2 Emissions across the Value Chain

Based on our environmental slogan "Technology for Eco Life," we aim to resolve environmental problems through leading-edge technology and reliable services, understand the environmental impact generated throughout our entire value chain and promote business activities to reduce that impact.

Our total CO_2 emissions of Scope 1 and Scope 2 is 43 kilotons, while Scope 3 as the sum of upstream and downstream activities accounts for a total of 11,829 kilotons, 99.6% of the total. Of this, CO_2 emissions when using products stand at 8,068 kilotons, about 70% of the total. This is why we consider the development of products with low CO_2 emissions during operation to be important.



In December 2023, we moved up the target year of our net zero target for 2050 by a decade, to 2040. We recognize dealing with climate change as a pressing global issue. We will implement various new measures, based on newly set targets. Through this, we will strive to preserve the global environment and actively lead efforts to achieve net zero as a company of global excellence.

In October 2023, we received SBT* certification, recognizing that the greenhouse gas reduction targets we had set for fiscal 2031 were scientifically based.

* SBT: Science Based Targets. SBTs are targets that are set by companies for 5 to 15 years in the future and that match the standards required by the Paris Agreement.

Targets recognized as SBTs

- Reducing absolute Scope 1 and 2 GHG emissions 70% by fiscal 2031, using fiscal 2019 as a baseline
- Increasing active annual sourcing of renewable electricity from 2% in fiscal 2019 to 100% by fiscal 2031
- Reducing Scope 3 GHG emissions caused from the use of sold products by 55% per wafer processed by fiscal 2031, using fiscal 2022 as a baseline

Environmental Goals and Progress

◎: Exceeded target ○: Proceeding well △: Need to accelerate to achieve the goal

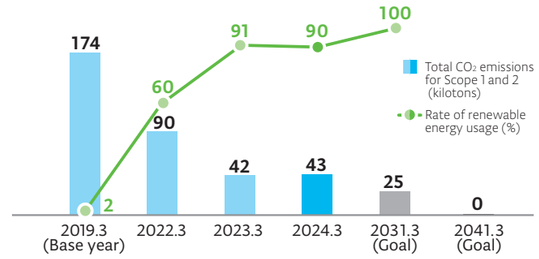
Item	Scope	Target	Target Year	Fiscal 2024 Results	Evaluation
Plants and offices	Total CO_2 emissions	70% reduction	Fiscal 2031	75% reduction	◎
	Renewable energy (electricity)	100%	Fiscal 2031	90%	○
	Energy consumption (per-unit basis)	1% year-on-year reduction	Maintain each year	Achieved by 2 out of 11 plants and offices	△
	Water consumption (per-unit basis)	Maintain base year level	Maintain each year	Achieved 10 out of 13 targets	○
Products	CO_2 emissions per wafer	55% reduction	Fiscal 2031	24% reduction	◎
Logistics	CO_2 emissions	30% reduction	Fiscal 2027	18.4% reduction	○
	Switch from wooden crates to STW[1]	50%	Fiscal 2024[2]	22.4% over full year period (26.4% in fourth quarter)	△

1 STW: Strong Triple Wall. Reinforced cardboard made up of three layers. 2 Target period extended to fiscal 2025

Initiatives Concerning Own Emissions (Scope 1 and 2)

We aim to reduce total CO_2 emissions from plants and offices by 70% (compared to fiscal 2019 levels) and use renewable energy for 100% of our power by fiscal 2031. By fiscal 2041, we plan to achieve net zero. The ratio of renewable energy used in all companies in fiscal 2024 was 90%. As a result of this, and assisted also by energy-saving activities, we have reduced total CO_2 emissions from our plants and offices by 75%, enabling us to reach our target ahead of schedule. From fiscal 2025, we will change our target to a reduction of 85% and further promote initiatives to reduce CO_2 emissions.

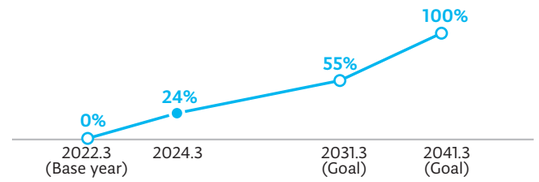
CO_2 Emissions Reductions from the Introduction of Renewable Energy, etc.



Initiatives Concerning Emissions Not from Our Group (Scope 3)

We aim to reduce CO_2 emissions per wafer by 55% compared to fiscal 2022 levels by fiscal 2031. We also seek to achieve net zero by fiscal 2041. As of fiscal 2024, we have reduced CO_2 emissions per wafer by 24% compared to the base year.

Reduction Rates in CO_2 Emissions Related to Products



Logistics Initiatives

In fiscal 2024, we proactively promoted the adoption of STW and bringing about modal shifts in transportation. STW is lightweight, which is expected to reduce CO_2 emissions from transportation. It is also recyclable and has a lower environmental impact than wood. By fiscal 2024, we had aimed to have a switchover rate from wooden crates to STW of 50% or above, but the actual switchover rate was 22.4%. We will work to standardize STW packaging and promote its use with customers. Additionally, we will extend the target achievement period for fiscal 2025 and promote our activities. In addition, CO_2 emissions from logistics were reduced by 18.4% as a result of modal shifts (including greatly increased usage of ferries between Osaka and Fukuoka) and joint delivery. In recognition of these efforts, we were chosen for commendation by the Maritime Bureau Director of the Ministry of Land, Infrastructure, Transport and Tourism as part of the 2022 Eco-ship Mark Certification program sponsored by the Eco-ship Modal Shift Business Execution Committee.

Initiatives for Product Development

We are working proactively on the development of products with reduced environmental impact. We are promoting the development of devices with high levels of environmental performance that leverage our technologies, such as etch technologies for 3D NAND use that are exceptionally fast yet an 84% lower global warming potential and laser separation technologies that contribute to technological innovation in state-of-the-art 3D device mounting and require no pure water for laser processing.

Initiatives Related to Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD)

Based on the TCFD recommendations, we examine the risks and opportunities that climate change poses to our business and take various response measures as we endeavor to make disclosures high in transparency. In fiscal 2024, we are considering the contents of IFRS S2[1] and are disclosing them to the extent possible.

In addition, we moved the net zero goals ahead of schedule from 2050 to 2040 and are actively pursuing initiatives to attain these goals.

Status of Initiatives Related to Recommendations of the TCFD

Items	Contents
Governance	• We have established the Environment Promotion Department and the Corporate Sustainability Management Department at our headquarters, and are pursuing initiatives for the TCFD under the entire Group • Our responses to climate-related risks and opportunities and progress toward our goals have been reported on and deliberated at the Sustainability Committee, and approved at the Corporate Officers Meeting attended by the CEO • The executive officers in charge of the environment and sustainability issues report on these initiatives to the Board of Directors, with the Board undertaking supervision • At the Global Environmental Council, comprised of members appointed by executives of the headquarters and Group companies, goals are set, progress is monitored, and the achievement of these goals is promoted
Strategy	• We are conducting analysis that takes into account the following points in order to identify medium- to long-term risks and opportunities that climate change poses for our business • Location of plants and offices • Occurrence of natural disasters caused by climate change and status of damages • Demands from customers, investors, NGOs and local communities • Government policies and regulations and taxation • Technological and market trends relating to renewable energy and energy saving • Climate change scenarios predicted by external agencies and research results • Under the 1.5°C scenario, we identified transition risks including rising energy costs associated with fuel and energy taxes, and under the 4°C scenario we identified physical risks such as the impact of abnormal weather. On the opportunity side, we identified advanced initiatives to address climate change through technological development • Risks manifest upstream, in direct operations and downstream, while opportunities manifest and are analyzed in direct operations and downstream in the value chain • In response to these risks and opportunities, we are implementing the findings from our scenario analyses into our business strategies and are undertaking initiatives aimed at reducing greenhouse gas emissions across the entire supply chain and achieving our medium- to long-term environmental goals, through introducing renewable energy and providing innovative manufacturing technologies that will contribute to lower power consumption in electronic products. We will increase our resilience (responsiveness to climate change) as a company by periodically reviewing the identified risks and opportunities and our responses thereto
Risk Management	• We have utilized enterprise risk management[2] to identify a wide range of risks arising in business activities, and have classified "Environmental Issues" including climate change as a key risk having high impact and probability of manifestation, and developed initiatives relating to this risk • We have formulated and executed measures to minimize the risks of these "Environmental Issues," and are monitoring the effect of said measures, working to understand the status of risk control and implementing the PDCA cycle for management • Short-, medium- to long-term company-wide risk management initiatives that are recommended by relevant divisions and councils are being undertaken at the facilities and divisions of the Group companies, after approval by the Manufacturing Companies Presidents' Council, which includes the corporate director in charge of the environment • For Scope 1 and 2 CO_2 emissions, in addition to implementing measures to reduce CO_2 emissions at our key manufacturing sites in Japan with high emissions, we are pursuing the adoption of renewable energy on a global scale • For Scope 3 emissions, we are focusing on the development of a range of environmental technologies and reducing CO_2 emissions in our suppliers' operations, based on recognition of the importance of providing products that generate lower CO_2 emissions because about 70% of the emissions in our entire value chain are generated during use of products after sale • We have formulated BCPs in anticipation of natural disasters caused by abnormal weather and other factors, and are working with our suppliers to implement measures to ensure that business operations can be maintained. We have conducted analysis of the risk of natural disasters at our key manufacturing sites in Japan, and confirmed such risks to be low
Metrics and Targets	• We are pursuing E-COMPASS initiatives[3] to help develop a data-driven society and preserve the global environment across the entire supply chain • With our semiconductor production equipment technology, we are contributing to enhancing the performance and lowering the power consumption of semiconductor devices being used around the world • We are delivering achievements in both process performance and environmental performance for semiconductor production equipment • We are reducing CO_2 emissions in all of our business activities[4] • Initiatives for our medium- to long-term environmental goals[5] • Moved Scope 3 net zero goals ahead of schedule to 2040 based on the world situation and market trends • Considering offsetting carbon credit certificates for emissions which are difficult to reduce in terms of net zero goals • Disclosures concerning IFRS GHG emissions[4]

1 IFRS S2: International Financial Reporting Standards (IFRS) Sustainability Standards of Disclosure S2 Climate-related disclosures
"TCFD" on our website www.tel.com/sustainability/management-foundation/environment/index.html
2 Risk Management P. 75-76 3 E-COMPASS P. 52
4 "Environmental Goals and Progress" on our website www.tel.com/sustainability/management-foundation/environment/index.html
5 Environmental Goals and Progress P. 54

Anticipated Risks and Opportunities of Climate Change Impact and Our Response

Timeline: Short-term = five years or less; medium-term = 2030; long-term = 2050
Scenarios used: 1.5°C scenario (1.5°C temperature increase), 4°C scenario (4°C temperature increase)
Scope: The entire Group as well as the entire value chain including upstream and downstream

Type (Scenario)	Risk or Opportunity Items	Timeline of Manifestation	Anticipated Risks or Opportunities	Impact on Tokyo Electron	Impact Evaluation[1]	Our Response
Transition Risks (1.5°C scenario)	• Carbon tax[2] and increased energy costs	Short- to medium-term	• It has been projected that the following levels of carbon tax will be levied: Fiscal 2026: Approx. 10,875 yen/t-CO_2 Fiscal 2041: Approx. 29,725 yen/t-CO_2 • Soaring electricity/ fuel costs	• Assuming that our greenhouse gas (GHG) emissions and renewable energy usage levels remained at the levels of fiscal 2024, the carbon tax burden would rise as follows: Fiscal 2026: Increase of 0.5 billion yen/year Fiscal 2041: Increase of 1.2 billion yen/year • Increased transportation costs • Increased procurement costs (energy costs would be passed on to suppliers)	Low	• Promote energy-saving and adopt renewable energy at plants and offices in order to achieve the medium-term environmental goals. Achieved 100% renewable energy usage at all plants and offices in Japan (90% globally) by fiscal 2024. Furthermore, the increased burden due to the introduction of a carbon tax calculated based on the level for fiscal 2024 will be reduced by 1.1 billion yen for fiscal 2026 and 3.1 billion yen for fiscal 2041 compared to the amounts originally estimated in fiscal 2021. The risk evaluation has been changed from "Low~Middle" to "Low"
	• Responses to environmental challenges including climate change and environment-related laws and regulations	Short- to long-term	• Poorer evaluations among customers, investors, nongovernmental organizations (NGOs) and local communities • Delays in our responses to need to meet customers' requirements and demands and energy-related regulations	• Increased reputational risks • Increased costs of capital investment/ R&D expenses • Decreased net sales • Legal proceedings and fines if regulations are violated	Low~ High	• Develop activities to achieve medium- to long-term environmental goals through E-COMPASS activities in the supply chain (1) Develop semiconductor production equipment technology that contributes to enhanced performance of semiconductor devices and lower power consumption (2) Achieving both the process performance and environmental performance of equipment (development of technology to achieve reduction of CO_2 emissions per wafer during the use of our products, etc.) (3) Reducing CO_2 emissions in all business activities (promotion to save energy in the supply chain and adoption of renewable energy, etc.) • Respond appropriately and promptly to environmental laws and regulations revised in each country • Conducting risk management, leveraging TCFD framework and our support for the TCFD • Promote disclosure of information on the above activities through integrated reports, our websites, etc.
Physical Risks (4°C scenario)	• Abnormal weather	Short- to medium-term	• Impacts on us, our customers and suppliers (supply chain disruptions, production/shipping delays, operation stoppages and other factors)	• Increased procurement costs • Decreased net sales • Increased insurance premiums	High	• Pursue the updating of our business continuity planning (BCP) based on future planning within our business continuity management (BCM), and carry out periodical BCP drills in line with the plans • Implementation of risk response through suppliers' BCP assessments[3]. Survey and evaluate risks and confirm the level of response to flood/landslides based on hazard maps of floods/landslides for suppliers as part of our surveying processes, and undertake follow-up of responses to such risks when necessary • Set out standards for a company-wide response to storm/flood damage (heavy rain, typhoons etc.), while implementing online training for all employees on responding to storm/flood damage in fiscal 2024 • Maintain a database of suppliers' production sites to promptly identify impacted suppliers and quickly collaborate in recovery efforts • Enroll in insurance in preparation for disasters resulting from abnormal weather
	• Higher temperatures	Medium- to long-term	• Increased usage of air conditioning and chillers in clean rooms and others with rising temperatures	• Increased energy costs	Low	• Develop activities to achieve medium- to long-term environmental goals through E-COMPASS activities in the supply chain (Refer to (1), (2) and (3) above for contents) • Generate innovations in environmental technology when responding to climate change, and to environmental regulations across the supply chain • Globally promote the latest in research and development to continually supply the Best Products with innovative technology in a timely manner • The development of etch technology for next-generation and beyond 3D NAND to realize an 84% reduction in the global warming potential and the development of debonding technology that does not require grinding upon wafer bonding, which contribute to a large reduction of deionized water consumption and reduction of CO_2 upon wafer procurement
Opportunities (Common)	• Improved operational efficiency relating to the environment	Short- to medium-term	• Higher productivity	• Reduced energy costs	High	
	• Initiatives that aim to respond proactively to climate change and generation of added value to products and services through technological innovation	Medium- to long-term	• Promote innovation toward development of low-GHG products and services, and accelerate efforts by creating new value, such as by developing equipment and technologies that contribute toward the manufacture of lower power consumption devices	• Increased net sales	Middle ~High	
	• Building resilience in our global operations		• Establish competitive superiority and business opportunities, by creating new value, including the development of equipment and technologies that contribute toward the manufacture of lower power consumption devices			

1 Impact evaluation: Sets out the findings of evaluations of the impact of risks or opportunities within Tokyo Electron.
2 Carbon tax: We referred to the International Energy Agency (IEA) Net Zero Emissions by 2050 Scenario for the increase in tax associated with GHG emissions. 1 U.S. dollar was converted as 145 yen.
3 Suppliers' BCP assessments: Surveys have been conducted since fiscal 2014 for suppliers accounting for more than 80% of our procurement spend (more than 85% of our procurement spend from fiscal 2023).

Biodiversity and Forest Conservation

In fiscal 2023, we formulated commitments to biodiversity and forest conservation. In fiscal 2024, in affirmation of the philosophy of the Taskforce on Nature-related Financial Disclosures (TNFD), we joined the TNFD Forum, which supports the TNFD's efforts. Furthermore, based on our fundamental understanding of the TNFD as a whole and the LEAP approach[1] advocated by the TNFD, we identified high priority areas and organized information about their status. We also conducted interviews with suppliers to confirm the status of their TNFD support and their awareness regarding it.

In order to become more nature-positive[2], we are investigating the impact that our business activities have on nature and the risks posed to our business by the loss of nature, and we are striving to disclose information appropriately. We will collaborate with our stakeholders in initiatives related to natural capital and biodiversity across our entire value chain.

1 LEAP approach: Locate, Evaluate, Assess and Prepare approach

"Environment" on our website www.tel.com/sustainability/management-foundation/environment/index.html

2 Nature-positive: Stopping and reversing harm to biodiversity in order to put nature back on a recovery course

Initiatives to Reduce Waste

To reduce waste, we are striving to curb the amount of waste we generate and to recycle waste. In addition to using an electronic manifest system[1] to properly manage waste, we are confirming statistical data regarding waste and performing on-site equipment confirmation to assess waste production trends and their causes. We are identifying buildings, processes and equipment which generate particularly large amounts of waste and implementing measures to reduce the waste they generate. These measures include separating waste and adding new processes. Specifically, to raise recycling rates and cut the amount of waste, we are thoroughly separating waste, thoroughly preventing the wasting of resources, rationalizing parts inventories, using reusable boxes for deliveries, reusing cushioning material and contracting with waste operators capable of performing recycling. Through these efforts we are reducing the amount of waste that is sent to landfills or incinerated without recovering energy. We are also renovating our waste storage sites to increase their capacity while reducing the frequency of collection. Through this, we are striving to not only cut waste processing costs but also to reduce environmental impact.

Through these efforts, in fiscal 2024 we produced 234 tons of waste to be incinerated without recovering energy or buried in a landfill and achieved a recycling rate[2] of 98.8%. This marked the 18th consecutive year, starting in fiscal 2007, that we have met our target of a recycling rate of 97% or above. We also maintained a high recycling rate at our overseas sites of 92.9%.

1 Electronic manifest system: A system in which, instead of using printed manifests to manage industrial waste, the flow of industrial waste products is managed through a communications network that connects information processing centers, waste generating enterprises, waste collection enterprises and waste disposal enterprises

2 Recycling rate: (Recycled amount/Amount of waste generated) × 100

Safety

Approach to Safety

Under the "Safety First" slogan, everyone at Tokyo Electron, from top management to field representative, is actively and continuously improving safety, giving safety the highest priority when carrying out all kinds of operations such as development, manufacturing, logistics, installation and maintenance.

TEL Incident Reporting System (TIRS)

In the event of an incident, we quickly share information with all the people concerned in the Group involved in safety including management, confirm the incident response by operating TIRS and relevant departments lead the implementation of measures to prevent reoccurrence and to check effectiveness.

Product Safety Design

Taking the entire product life cycle into consideration, we carry out product risk assessments as early as possible in the development phase. We implement inherently safe design[1] to reduce the risks posed to humans by incorporating the assessment results in the design. We conduct global surveys of increasingly strict laws and regulations and conduct compliance checks through third-party assessment bodies to ensure conformity with international safety standards and SEMI Standards[2] on the product we ship. We have also established a system to comply with safety regulations of the regions where our product is delivered while working with overseas subsidiaries.

1 Inherently safe design: A design concept that eliminates the cause of the machine's harm to humans through the safety design of the machine

2 SEMI Standards: SEMI Standards are regulations formed by SEMI, an international industry body which serves manufacturers of semiconductor production equipment, flat panel display production equipment, materials and the like, to unify all of these international industrial standards.

Safety Training

To help increase employees' awareness concerning safety and to create a safe workplace, we developed two main training programs (safety foundation training and safety technical training) to be used worldwide, with target employees required to undergo this training.

The aim of safety foundation training is for all employees to learn the basics of safety to enable them to carry out operations safely in the workplace. We carry out introductory training for new hires, and are working to improve employees' retention of safety awareness by providing refresher training once every three years.

In the second year after entry into the Group, we conduct safety foundation training for employees in their second year with the aim of supplementing safety foundation training. Based on safety foundation training, the training focuses on preventing accidents due to falling and lower back pain due to lifting heavy objects, which are areas in which a particularly high number of accidents occur. Combined with the implementation of hazard prediction training, we work to improve our sensitivity to safety.

Safety technical training is a more specialized type of program aimed at engineers who work on production lines and in cleanrooms and is provided in the form of refresher training each year. In addition, we provide training on safety rules, laws and regulations in various countries for overseas transferees.

As a result of these ongoing initiatives in relation to reinforcing safety training and product safety design, our TCIR* reached 0.15 in fiscal 2024, which is top class in the semiconductor production equipment industry. We will make further efforts toward achieving the target in our Medium-term Management Plan of 0.10 or less.

* TCIR: Total Case Incident Rate. The number of workplace incidents per 200,000 work hours.

Incident Prevention Initiatives

We deploy the activities below with the aim of creating a safer work environment.

Comprehensive Safety Inspections

We carry out regular safety inspections of the entire Group based on the safety inspection items that we have prepared relating to the various services and equipment installation work carried out at customers' onsite operations, work on our own production sites and the internal management of our equipment.

By revealing issues in work safety, training methods, safety management methods for equipment and the like, these regular inspections assist each Group company with their voluntary activities for maintaining and improving their safety environments.

Feedback on Safety Specifications

If changes relating to safety specifications are requested by customers, or if an incident occurs as a result of equipment design, we provide the information to the Production Design Department as feedback as quickly as possible and work to improve the organizational structures that will move forward with the necessary discussions.

Safety Activities for Suppliers

When we ask our suppliers to carry out work, we work to promote safety activities with our suppliers upon sharing written material that set out things such as our basic work safety rules and customers' rules in advance and gaining their understanding.

Quality

Efforts for Quality Improvement

In order for each employee to correctly understand and practice quality assurance activities, it is important to clearly define the goals to be achieved, and to create an environment and foster a culture in which those goals are widely understood. From the ideal form, we established "Our Approach to Quality" and "Quality Policy" and communicate the importance of quality to our employees to increase their quality awareness. Furthermore, we review regulations and basic education on quality as appropriate and implement the most recent contents. Also, through making quality information visible, employees constantly acknowledge their own roles and goals, and by encouraging the implementation of proactive quality activities in work, we strive to bolster the prevention of product quality issues. Employees confirm each other's quality in various situations thoroughly, leading to improvement and growth of business processes. We strive to provide high quality products and services that exceed customer expectations.

Approach to Quality

We define our approach to quality as follows.

"The Tokyo Electron Group seeks to provide the highest-quality products and services. This pursuit of quality begins at development and continues through all manufacturing, installation, maintenance, sales and support processes. Our employees must work to deliver quality products, quality services and innovative solutions that enable customer success."

In addition, we established the Quality Policy as follows, and are striving to practice this policy.

Quality Policy

1. Quality Focus
   Focusing on quality to satisfy customers, meet production schedules and reduce required maintenance even with temporary cost increases.
2. Quality Design and Assurance
   Building quality into products and assure in-process quality control, from the design and development phase throughout every process.
3. Quality and Trust
   When a quality-related problem occurs, working as a team to perform thorough root cause analyses and resolve problems as quickly as possible.
4. Continual Improvement
   Ensuring customer satisfaction and trust by establishing quality goals and performance indicators and by implementing continual improvement using the PDCA cycle.
5. Stakeholder Communication
   Listening to stakeholder expectations, providing timely product quality information and making adjustments as needed.

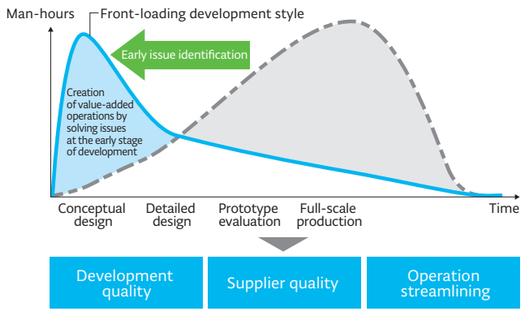
We have established regulations based on our company-wide quality policy compiled in the TEL Manual (TM) and the TEL Guidelines (TG) for each major business category, such as development, design, manufacturing and service, and we are using these regulations in the entire Group including manufacturing sites, and in our suppliers.

Furthermore, each manufacturing site builds a quality management system based on the TM and the TG. In addition to attaining ISO 9001: 2015, the international standard for quality management systems, we are striving for continuous improvement by efficiently operating the PDCA cycle through repeated internal audits and third-party organization audits at each of our manufacturing sites. The Quality Assurance Division, centered in the headquarters, sets quality goals every year based on the results of the previous term, and regularly reviews the progress of achievement of those goals.

In addition, by implementing self-process assurance[1], we conduct strict quality-related risk management and development/design inspections from the development stage, and strive to thoroughly verify customers' operations using simulations. Through these activities of self-process assurance, we work to improve the accuracy of each process and reduce the reworking costs[2], and we enable employees to create time to focus on high-value-added work in the upstream processes while also practicing "Shift Left" (front-loading).

1 Self-process assurance: Comprehensive measures that prevent non-conformance in each process and prevent such products from passing through to subsequent processes
2 Reworking costs: Costs incurred by going up the chain of processes and reworking when there is non-conformance

Shift Left (Front-loading) Initiatives



Supply Chain Management

Principles and System of Supply Chain Management

To build a supply chain that is sound and sustainable, Tokyo Electron has formulated a procurement policy based on the laws, regulations and social norms of each country, as well as the RBA Code of Conduct, and together with its suppliers, is implementing activities based on this policy.

We work to build relationships of trust with our suppliers, including materials suppliers that handle parts and raw materials, staffing suppliers that provide services and logistics suppliers that handle physical distribution operations, who support our business as partners. Through ongoing communication with our suppliers, we identify issues in the supply chain from a variety of perspectives, such as labor, health and safety, the environment and ethics. These issues are shared among the relevant departments which then work on improvement measures, under the supervision of the CEO. We will continue to strive to create value across the supply chain by working with our suppliers to deploy our operations in compliance with global standards.

Initiatives in the Supply Chain

Sustainability Operations

In accordance with RBA auditing standards, our company has conducted an annual sustainability assessment on suppliers involved in materials, staffing, logistics* etc. in areas such as labor, health and safety, the environment and ethics since fiscal 2014. In fiscal 2024, we held a briefing for our suppliers about the sustainability assessment where we explained the results of the most recent assessment, remediation points for each item and also requested that remediation activities be made. Furthermore, we request remediation activities individually for suppliers who had discrepancies in recruitment fees, leading to improvements. To ensure that all people in our supply chain can work of their own free will, we have expressly stipulated our zero-tolerance policy for forced labor and bonded labor, and have communicated this to our major suppliers.

In addition to conducting such assessments, we will work together with suppliers to further ensure compliance with the RBA Code of Conduct by carrying out RBA audits in the future in our major manufacturing sites in Japan and overseas.

* Materials suppliers: Assessments have been conducted for suppliers accounting for more than 80% of our procurement spend (85% from fiscal 2023), staffing suppliers: Assessments have been conducted since fiscal 2019 on 100% of employment agencies and contracting companies (internal contractors), logistics suppliers: Assessments have been conducted since fiscal 2019 on 100% of customs-related operators

Responsible Procurement of Minerals

We see taking action against conflict minerals obtained through illegal exploitation, which lead to human rights violations and poor working conditions, as our corporate social responsibility. Our resolute goal is to eliminate the use of raw materials made from these conflict minerals, as well as any parts or components containing them. In alignment with this way of thinking, we conduct a responsible mineral procurement survey in accordance with the OECD[1] Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas. In fiscal 2024, we conducted our tenth annual survey on potential conflict minerals using the CMRT[2] with 3TG[3] as out target mineral. As a result, we were able to identify 238 smelters conformant with RMAP[4] (one of the standards used for determining that minerals are not connected with conflict). In addition, none of the materials we procured were found to contain 3TG involved in conflict. We shared the results of the survey with our suppliers and implemented due diligence activities such as adding cobalt to the target minerals from fiscal 2025.

1 OECD: Organisation for Economic Co-operation and Development
2 CMRT: Conflict Minerals Reporting Template. Survey format for reporting on conflict minerals provided by the Responsible Minerals Initiative (RMI) established in accordance with international guidelines on conflict minerals
3 3TG: Tantalum, tin, tungsten and gold
4 RMAP: Responsible Minerals Assurance Process. A program promoted and led by the RMI for auditing smelters/refiners to validate that they do not use conflict minerals.

Procurement BCP

As part of our business continuity plans, we collaborate with suppliers on ongoing disaster preparation. To appropriately grasp the increasingly complex supply chain, while making it visible with the use of IT systems, we maintain a database of suppliers' production sites so that if a crisis arises, we can promptly identify impacted suppliers and quickly collaborate in recovery efforts. There are now approximately 32,000 registered production sites as of fiscal 2024, and post-disaster impact assessments (conducted when disasters occur) have been implemented three times. In addition, we conduct BCP assessments on our suppliers and analyze their responses to provide them with feedback to promote improvements in areas of concern.

Supply Chain Sustainability Process

Continuous Improvement of Business Operations and Creation of New Values

Initiatives of Digital Transformation (DX)

Based on the idea that DX initiatives are a means and an opportunity to achieve our management vision and management plan, and to create corporate value, in January 2021, we formulated the TEL DX Vision and the TEL DX Grand Design. Through digital technologies, we will promote product transformation and business transformation* to accelerate and strengthen business activities associated with important material management issues.

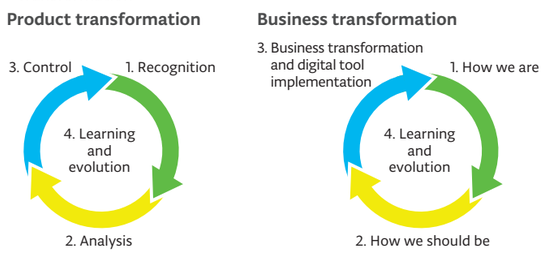
* Product transformation: Contributing to customer value creation in a variety of situations, from development to mass production,
Business transformation: Improving capital efficiency in a variety of situations, from the product planning stage to maintenance.

TEL DX Grand Design

In product transformation, we will solve high-level issues while repeating the processes of (1) Recognition (sensing and monitoring), (2) Analysis and prediction, (3) Control and (4) Learning and evolution (autonomous), while aiming to improve customer value.

In addition, in business transformation, we will grasp the current state of internal business while envisioning how work should be, and change our work processes by using digital tools, to improve our capital efficiency. We are also promoting the use of digital technology in our management foundation and business support departments, which are necessary to realize these transform initiatives.

Digital Technology-based Product Transformation and Business Transformation



To develop DX human resources, we define the human resources necessary for promoting DX (DX engineers), and formulate a training plan to acquire skills. We also create a data platform and data governance, and work to cultivate a digital culture, so that not just DX engineers, but all employees can utilize data in their daily operations. Specifically, this means that we invite outside DX and AI experts to give presentations and hold various digital-related events internally.

To enable our DX initiatives to lead to the creation of corporate value, we opened the TEL Digital Design Square in Sapporo in November 2020 as the home base for out DX activities. We are also developing leading-edge software technologies needed for semiconductor production and leading-edge digital technologies such as generative AI.

In May 2023, our headquarters was also recognized as a DX-certified business operator under the Digital Transformation Certification initiative established by the Ministry of Economy, Trade and Industry.

Digital Transformation Certification

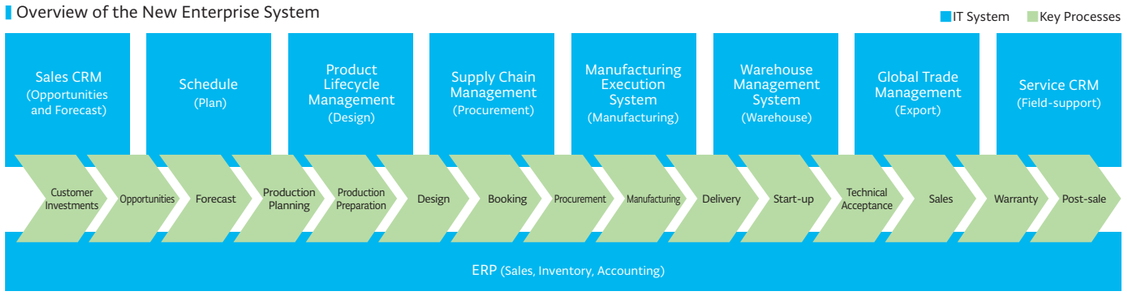
Continuous Improvement of Business Operations

We are implementing a new enterprise system (ERP*) to further improve productivity and quality. The purpose of the system is to (1) significantly improve operational efficiency, (2) make management decisions that respond quickly to changes and (3) create new value by utilizing globally integrated information with an eye toward overall digital transformation.

In addition to the headquarters, where the system has already been implemented, we first completed the implementation of this system at overseas subsidiaries and manufacturing sites in Japan in fiscal 2024. Going forward, we will make maximum use of the knowledge we have gained through the process so far, and will proceed with the implementation of the system to subsequent sites. In addition, we will work with our partner companies to realize a globally integrated system by developing functions and others to improve operational efficiency and further enhance system performance.

* ERP: Enterprise Resource Planning. A system that integrates the core business operations of an enterprise, such as accounting, personnel, production, logistics and sales, for better efficiency and centralized information.

Overview of the New Enterprise System



Intellectual Property Management

We are promoting intellectual property (IP) management under the fundamental tenet of contributing to an increase of corporate profits by supporting our business activities through IP protection and its utilization.

To achieve sustainable growth in the semiconductor industry where the growth is driven by technological innovation, we are globally expanding our R&D activity including industry-academia collaborations. Our IP department collaborates with R&D departments and business departments at each of our R&D and production sites, and with the marketing department at headquarters. The aim is to provide appropriate protection for innovations created based on development seeds and market needs, and to build an IP portfolio that is compatible with our R&D strategy and its Shift Left focus.

In 2023, the number of inventions created in Japan was 1,186 and 303 overseas. We have maintained the global patent application rate approximately 75% for 5 consecutive years, and the allowance rate* of the filed patents has reached 81% in Japan and 80% in the United States. Furthermore, various inventions have been created through collaboration with domestic and overseas business partners, consortium and academia, and we have jointly filed patent applications on 61 inventions in the past three years.

Consequently, the number of active issued patents as of March 31, 2024 is 23,249, which is the largest number in the semiconductor production equipment industry, and we are building our competitive edge in the intellectual property field on a global level.

Our patent portfolio has also been rated highly for aspects such as impact on other companies and improved technological value over recent years. As in 2023, we have again been selected in the Clarivate Top 100 Global Innovators 2024 and the LexisNexis Innovation Momentum 2024: The Global Top 100.

Top 100 Global Innovator 2024 Clarivate

We consider IP to be an important asset for improving medium- to long-term corporate value. We will therefore continue striving to improve the competitiveness of our products through differentiation of our technologies by building a competitive IP portfolio in terms of both quantity and quality.

* Figures calculated in 2023

Corporate Governance

Basic Stance

To achieve success in global competition and realize sustainable growth, we believe it is important to build corporate governance system that support this. To that end, we have built a structure which utilizes to the maximum the worldwide resources we possess and have worked to incorporate a wide range of opinions to strengthen our management foundation and technology base, establishing a governance structure capable of ensuring that we attain global-level earnings power. We have established the Corporate Governance Guidelines* and outlined the corporate governance structures that we have developed and reinforced to date, in advance of other companies.

* "Corporate Governance" on our website www.tel.com/about/cg/

Hybrid Governance Structure

We have enhanced the independence of the Board of Directors and strengthened its supervisory function by having outside directors make up the majority of the board, while ensuring an auditing function by the Audit & Supervisory Board, which is independent of the Board of Directors. We have also established a Nomination Committee and a Compensation Committee, both of which are chaired by outside directors, and in which outside directors make up the majority of each. Furthermore, we have also introduced a Corporate Officer system, and through the appropriate delegation of authority, we are working to establish a strong execution system with quick decision-making and agile business execution. In this way, we have established an effective, hybrid type of governance system that utilizes the advantages of the Audit & Supervisory Board system and also incorporates elements of the Company with Three Committees.

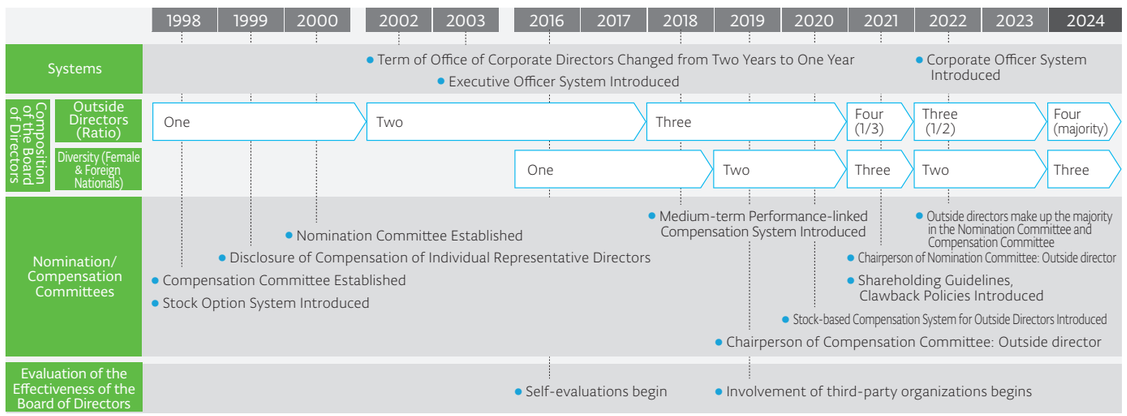
Characteristics of Our Corporate Governance

A Board of Directors that is Independent and Diverse	Strengthening the Functions of the Executive Side	Advanced Initiatives Taken Ahead of Other Companies
• Majority of outside directors (4 outside directors, 3 inside directors) • Two of the seven directors are women • Outside directors make up majorities in the Nomination Committee and Compensation Committee, including their respective chairpersons	• Introduction of a Corporate Officer system with corporate officers as the highest-level officers on the executive side of the Group • Establishment of the Corporate Officers Meeting as the highest decision-making body on the executive side of the Group, and delegation of authority from the Board of Directors to the executive side	• Introduction of stock-based compensation system for outside directors • Introduction of Shareholding Guidelines[1] for corporate directors, corporate officers and executive officers and Clawback Policies[2] for executive directors and corporate officers

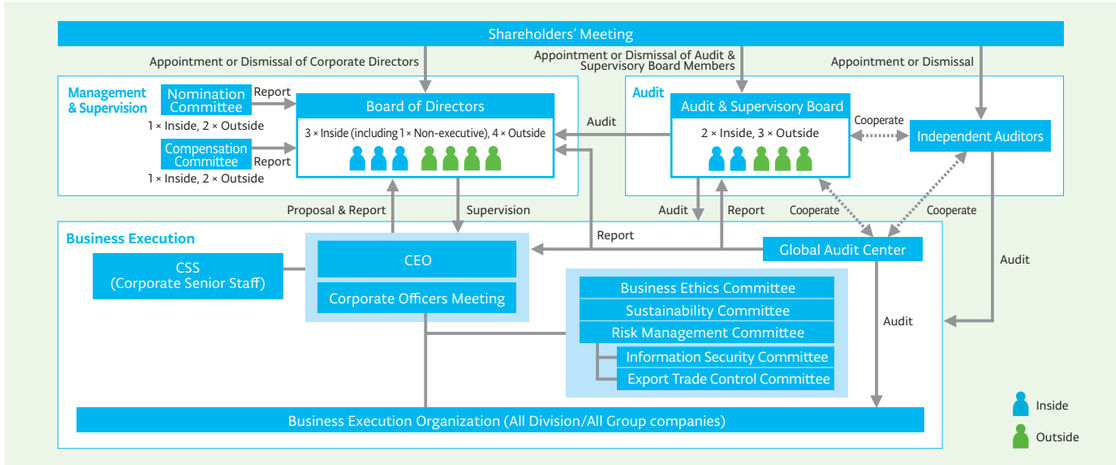
1 Introduced for the purpose of better ensuring continuous improvements to corporate value, and definitive sharing of profits with stakeholders (effective as of July 1, 2021; revised on April 30, 2024 for CEO and for inside directors and corporate officers). We have set goals to, after these Guidelines are revised or within five years of inauguration, retain TEL shares equivalent to the values described below.
<CEO> 6 × fixed basic compensation (annual amount), <Inside Directors, Corporate Officers> 3 × fixed basic compensation (annual amount), <Outside Directors, Executive Officers> 1 × fixed basic compensation (annual amount)

2 Effective as of July 1, 2021. Demands the return of performance-linked compensation if major corrections of financial figures are deemed necessary due to intentional misconduct of Executive Directors and Corporate Officers. The compensation that will be subject to return will be the excess portion of performance-linked compensation received during the fiscal year in which the misconduct was discovered, as well as such compensation received during the preceding three fiscal years.

Changes in Corporate Governance (Since CY1998)



Corporate Governance Framework



* Purpose of Committees on the Executive Side
Business Ethics Committee (Twice annually): Verifies the status of practice in accordance with the Code of Ethics; proposes and supports training and educational programs relating to business ethics; confirms compliance promotion activities
Sustainability Committee (Twice annually): Considers and formulates sustainability-related policies; sets and manages sustainability goals; implements company-wide projects (the environment, human rights, RBA, etc.)
Risk Management Committee (Twice annually): Performs and shares information on company-wide risk management; establishes systems and mechanisms to investigate and counter risk scenarios for individual risk items in collaboration with risk owners
Information Security Committee (Twice annually): Spreads awareness of information security strategies and policies; shares the current status of information security plans, etc.
Export Trade Control Committee (Annually): Promotes export compliance activities

Main Topics for the Board of Directors and Off-site Meetings

CEO	• Reports on status of business execution by CEO (each meeting) • Sharing of CEO missions
Medium- to Long-term Growth Strategies	• Market environments over the medium to long term and our growth plans • Medium-term Management Plan and beyond growth strategies • Financial strategies, capital policy, human resource strategies • Expansion and reinforcement of development and production facilities in Japan and overseas • Business innovation projects • Production Innovation, Proactive procurement strategies • Strengthen the frontline
Sustainability	• Review of material issues • Initiatives for environment and net zero • Initiatives for DE&I • Investment in human capital and intellectual property activities

Risk/ Compliance	• Risk management • Legal affairs and compliance • Information security • Geopolitical risks
Corporate Governance	• Reports on internal audits • Status of investment targets and cross-shareholdings • Status of IR activities • Status of the activities of the Nomination Committee and Compensation Committee • Status of progress of successor development plan • Confirmation of progress on issues in evaluation of the effectiveness of the Board of Directors • Review of Corporate Officer system • Closed session on evaluation of representative directors (members of the Board of Directors excluding the representative directors)

CSS (Corporate Senior Staff)

For the purpose of fostering common understanding of management strategies throughout the Group and promoting strategy execution efficiently and forcefully by managing the progress on management plans and reviewing additional measures from a global, cross-organizational perspective and a medium- to long-term management perspective, without being encumbered by short-term perspectives of each area of responsibility, we have established Corporate Senior Staff (CSS), consisting of our executive officers and senior management of overseas subsidiaries. CSS members meet four times a year.

Meeting held in Taiwan in March 2024

Corporate Officer System

As a leading company in the semiconductor production equipment industry, we introduced our unique Corporate Officer system in June 2022 to further strengthen governance and implement quick decision-making and agile business execution. Corporate officers are the highest-level officers on the executive side within the Group and are responsible for the management of the entire Group, taking the same perspective as the CEO. In addition, corporate officers attend Board of Directors meetings, where they give briefings on business execution. This is beneficial for the Board of Directors to properly supervise the executive side and for discussions at Board of Directors meetings to be put to use appropriately and speedily in business execution, and also contributes to the promotion of proactive management.

We have also established the Corporate Officers Meeting as the highest decision-making body on the executive side.

Sessions of the Corporate Officers Meeting are held once a month as a basic principle, with inside directors and inside Audit & Supervisory Board members (who are not corporate officers) taking part in addition to the corporate officers. The meetings contribute to the realization of agile business execution by quickly deliberating and making decisions on key items on the executive side, including those items for which authority has been delegated from the Board of Directors to the executive side.

Furthermore, effective July 2024, we have renamed the position of division general managers (the head of each divisional organization) and established the position of division officer. Division officers are responsible for the global operations of their respective divisions and are in charge of developing and executing effective strategies and promoting "offense × offense governance," including risk management.

Highest position on the executive side within the Group	Has responsibility for execution of the entire company's management, taking the same perspective as the CEO
Members of the Corporate Officers Meeting	Realizes agile business execution by quickly deliberating and making decisions on key items on the executive side
Attendance at Board of Directors meetings (without voting rights)	Utilizes discussions at Board of Directors meetings appropriately and speedily for business execution

Corporate Officer's Message

Tatsuya Nagakubo
Corporate Officer
Executive Vice President &
General Manager

1 Effect of Introducing the Corporate Officer System

The Corporate Officer system has become an established structure that has gained in significance within the Company. Each corporate officer is now even more aware of their role of taking the same perspective as the CEO, and as such they are engaging actively from a broader perspective at meetings of the Board of Directors. The Corporate Officers Meeting, which functions as the highest decision-making body on the executive side, also conducts timely and lively discussions on various topics, including matters for which authority has been delegated by the Board of Directors. I feel that this body has evolved over the two years since the system was introduced. Items discussed at the Corporate Officers Meeting are also shared with the Board of Directors which plays a role in supervision of the Board's business execution as well.

2 Challenges for the Future

We recognize that there is an urgent need to recruit and develop successors for each corporate officer position to ensure we can strongly promote important matters aimed at medium- to long-term growth strategy and corporate value enhancement. Our corporate officers are all spending time discussing this subject and they are making steady progress in developing succession plans. In this way, corporate officers who share the same perspective as the CEO will be able to focus on higher-level management issues.

Establishment of the Director Compensation System

Basic Policy on Director Compensation

Our Group emphasizes the following points in its basic policies on compensation for corporate directors and Audit & Supervisory Board members.

1. Levels and plans for compensation to secure highly competent management personnel with global competitiveness
2. High linkage with business performance in the short term and medium- to long-term increase of corporate value aimed at sustainable growth
3. Securement of transparency and fairness in the decision process of compensation and appropriateness of compensation

Compensation Structure

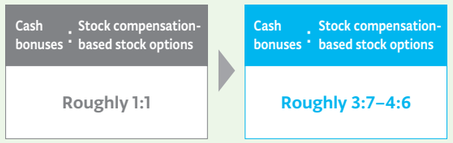
Regarding compensation for inside directors, in fiscal 2024, the ratio of stock-based compensation in annual performance-linked compensation was increased, with a portion of it being made non-performance-linked compensation (stock-based compensation). As a result, compensation for inside directors consists of fixed basic compensation, annual performance-linked compensation, medium-term performance-linked compensation and non-performance-linked compensation (stock-based compensation). The following table sets out an overview of our policies and decision-making methods for each type of compensation.

Type of Compensation		Recipient: Inside Directors	Recipient: Outside Directors	Recipient: Audit & Supervisory Board Members	Overview of Compensation
Fixed Basic Compensation		○	○	○	• Monthly compensation is determined within the limit of total fixed basic compensation, which has been resolved at the Shareholders' Meeting • For inside directors, amounts are determined according to the scale of job responsibilities by making reference to the job grade frameworks of an external expert organization (Willis Towers Watson)
Annual Performance-linked Compensation	Cash Bonuses	○	—	—	• Amount to be paid is linked to business performance in each fiscal year, with a view to motivating recipients to contribute to improving the business performance in each fiscal year • Consisting of cash bonuses and stock compensation-based stock options • The ratio of cash bonuses to stock compensation-based stock options of the annual performance-linked compensation and non-performance-linked compensation total is set roughly from 3:7 to 4:6, commensurate with job responsibility • Specific amounts, number of stock options granted shall be commensurate with the Company's business performance and the results of individual performance evaluations in the relevant fiscal year • For indicators of corporate business performance, net income attributable to owners of parent and consolidated ROE are adopted, and the result of the comparison with competitors in terms of operating margin and operating margin growth ratio is reflected on the amount of payment • Individual performance evaluation items include contribution to short- and medium-term management strategy targets including ESG • Profit-sharing type compensation commensurate with business performance in each fiscal year is paid, therefore no policy is in place for the payout proportion of fixed basic compensation • Stock compensation-based stock options are subject to a three-year exercise restriction period from the granting of rights, with the aim of motivating recipients to share a shareholder perspective, while contributing to increasing corporate value over the medium- to long-term
	Stock Compensation-based Stock Options	○	—	—	
Medium-term Performance-linked Compensation	Performance Share (Stock-based Compensation)	○	—	—	• Paid to motivate recipients to contribute to medium-term business performance improvement • If the payout rate is 100%, the payment amount is set at around 30% to 100% of the fixed basic compensation, commensurate with the scale of job responsibility • The number of shares delivered is determined depending on the level of achievement of performance goals for the covered period (three fiscal years) • Consolidated operating margin and consolidated ROE are adopted as performance indicators
Non-performance-linked Compensation	Stock Compensation-based Stock Options	○	—	—	• Paid to motivate recipients to contribute to medium- to long-term business performance improvement • Payment amount is set to a range of two to three times the fixed basic compensation, commensurate with job responsibility • Set a three-year exercise restriction period from the granting of rights with the aim of motivating recipients to share a shareholder perspective and increasing corporate value over the medium- to long-term
	Restricted Stock Units (Stock-based Compensation)	—	○	—	• The remuneration system is designed to be more consistent with the expected role of giving advice to the management from the perspective for increasing corporate value over the medium- to long-term • Payment amounts is set at around 50% to 60% of the fixed basic compensation to ensure an adequate balance between cash compensation and stock-based compensation • The Company shares shall be delivered after the expiration of the applicable period (three fiscal years)

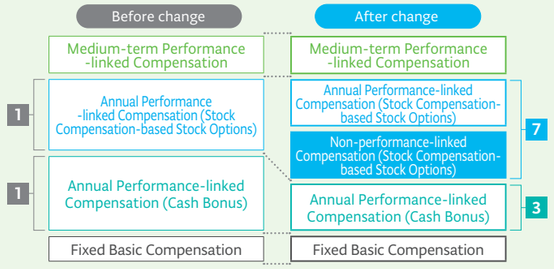
Changes Associated with the Introduction of Non-performance-linked Compensation (Stock-based Compensation)

■ Composition of Cash Bonuses and Stock Compensation-based Stock Options

<The Company's Corporate Directors/Corporate Officers>



■ Composition of CEO Compensation



Evaluating the Effectiveness of the Board of Directors

Overview of Evaluations of Effectiveness

To further enhance our governance and the effectiveness of the Board of Directors, we have conducted annual evaluations of the effectiveness of the Board since fiscal 2016 and have disclosed summaries of the results.

Evaluation of the Effectiveness of the Board of Directors for Fiscal 2024

Scope of Evaluation

Board of Directors overall (including details of the activities of the Nomination Committee and Compensation Committee)

Process

In light of the results of analysis by external experts based on questionnaires and individual interviews, we conducted a self-evaluation following extensive discussion at meetings of the Board of Directors and at meetings for the exchange of opinions by outside directors and outside Audit & Supervisory Board members.

Evaluation Items

The main evaluation items for evaluating effectiveness are as follows.

- Overall evaluation
- Composition of the Board of Directors
- Preparation in advance of Board of Directors
- Board of Directors operations
- Deliberations by the Board of Directors
- Roles and operational status of the Nomination Committee and Compensation Committee
- Roles of Audit & Supervisory Board members
- Corporate Officer system

State of Response to Issues in the Previous Fiscal Year's Effectiveness Evaluation

Issues	State of Responses
Aiming to become the top company globally in the medium- to long-term we will continue to work on each of the following matters to further strengthen the supervisory function of the Board of Directors and the management and execution functions of the executive side and will further enhance its effectiveness by regularly reviewing its progress	• The corporate organizational structure was discussed at an off-site meeting, and the current policy of continuing with the Audit & Supervisory Board model was confirmed • Progress and issues related to each item were discussed at a Board of Directors meeting and at an off-site meeting
The Company will systematically set agendas in line with medium- to long-term strategies and issues for growth, and will enhance discussions from a long-term perspective	• A list of annual agenda items was presented • Although important topics related to medium- to long-term strategies were discussed at off-site meetings, there is still room for further deepening and concretizing efforts towards realization of our Vision
The Company will enhance the effectiveness of the Corporate Officers Meeting, the highest decision-making body on the executive side	• Efforts are being made to optimize decision-making processes, including reviews of meeting bodies • The Board of Directors is provided with the explanatory materials and minutes of the Corporate Officers Meeting, and the content of deliberations is reported on periodically at the Board of Directors meetings
The Company will conduct an analysis of the decision making of the Board of Directors, clarify the points of deliberation, and enhance opportunities for sharing information with outside directors and outside Audit & Supervisory Board members on occasions other than board meetings and off-site meetings	• While continuous efforts are being made to improve the granularity of materials and information, there is room for further improvement to be addressed in order to reduce the time needed to explain things and to have a complete discussion • Free discussions were held between the Chairman of the Board of Directors, outside directors and outside Audit & Supervisory Board members, information exchange meetings were held regularly between the CEO, outside directors and outside Audit & Supervisory Board members, and factory tours were conducted in conjunction with off-site meetings

Overview of Fiscal 2024 Evaluation Results

The Company's Board of Directors believes that the Board of Directors is very effectively ensuring that the key roles and obligations of the Board of Directors are being fulfilled, and that the Board, including the Nomination Committee and the Compensation Committee are functioning effectively.

The results of analysis and evaluation by external experts also confirmed that our Board of Directors operates effectively and engages in free and open-minded discussion, and that there has been a positive trend toward improvement with regard to issues raised in the previous fiscal year. In addition, it was pointed out that the Company has entered a stage where discussions at the Board of Directors should focus on the overarching perspective of being a "leading global company," and that as a prerequisite to that, the role expected of the Board of Directors is being looked into.

Based on the results of the external experts' analysis and evaluation, discussion at the Board of Directors will continue on the functions and roles that it should play in light of the Company's desired vision for sustainable growth, and the necessity to further strengthen its management and execution functions has been recognized.

Future Initiatives

In light of the results of this evaluation, the Company will engage in the initiatives below, and carry out periodic progress reviews to further increase efficacy in those areas.

Role and function of the Board of Directors

- Working backward from the future outlook for sustainable growth, the medium- to long-term perspective for the Company will be shared at the Board of Directors meetings and off-site meetings, and the functions and roles that the Board of Directors should play, and the state of its governance system will continually be discussed.
- From the perspective of increasing the Company's corporate value, the Board of Directors' agenda will continue to be set appropriately, while working to align its perspective on medium- to long-term growth strategies and further enhance strategy discussions.

Further strengthening of operational systems and acceleration of succession planning

- The existing system of Corporate Officers that also serve as division managers will be revised and a Division Officer system will be newly introduced. As a result, the system will be that Corporate Officers who share the same perspective as the CEO will focus on higher-level management issues, while Division Officers, which are composed mainly of next-generation management personnel, will supervise business execution in each division.

Messages from Newly Appointed Outside Directors and Outside Audit & Supervisory Board Member

It is an honor to join the Board of Directors of Tokyo Electron, a leader in the semiconductor production equipment industry. Tokyo Electron's Vision and TEL Values resonate very much with me and are principles and values that I can be proud of. I am fully committed to supporting the management team's growth strategy, technological innovation and value creation efforts. I will also endeavor to be constructive and proactive in my supervisory and advisory role as a director.

Global enterprises are facing unprecedented geopolitical risk, information security, industrial competition, activism and social responsibility challenges.

I have been involved in international finance for nearly 40 years, and as part of that experience, I have reflected on the macroeconomy, security, monetary and fiscal policy, and the political situation between the United States and Japan. I will fulfill my responsibilities as a director in good faith for the development of the Company and to meet the expectations of employees and all stakeholders.

Joseph A. Kraft Jr.
Newly appointed
Outside Director

Tokyo Electron embraces an important mission of driving technological innovation in semiconductors and supporting the sustainable development of society. I respect its corporate culture of effecting change by viewing it as an opportunity—a culture that has supported Tokyo Electron's innovation—and as a member of the Board of Directors, I will actively support taking on new challenges and sound risks.

In an environment of increasing uncertainty, I recognize that management requires increasingly diverse perspectives. In the past, I was in charge of brand business and DE&I in a completely different industry. Drawing on the different nature of my career, I hope to help reduce any blind spots in Tokyo Electron's vision and to contribute to the development of organizational capacity that supports innovation, that is, a corporate culture that leverages diversity.

To meet stakeholder expectations, I will strive to improve Tokyo Electron's management foundation and corporate value with a steady eye to the future through constructive discussions with fellow directors and the executive leadership team.

Yukari Suzuki
Newly appointed
Outside Director

I am honored to be appointed as an outside Audit & Supervisory Board member at Tokyo Electron, a company that continues to pioneer the frontier of the semiconductor industry. Since its founding as a trading company specializing in technology, Tokyo Electron has consistently worked with its customers to remain at the forefront of innovation, transforming and developing its business model while steering its way through many adversities to reach the position it holds today. I believe that Tokyo Electron's voracious frontier spirit and flexibility in thought—even after more than 60 years in business—is a distinctive quality of the Company and is the source of its competitiveness.

Having lived through a period of upheaval and change in the financial world—from rapid economic growth, to collapse of the bubble economy and financial difficulty, to reform of financial and capital markets, and responses to innovation in financial technology—I have keenly felt the importance and difficulty of maintaining a balance between the maintenance and improvement of entrepreneurial spirit and the establishment of effective governance.

Leveraging that experience, the lessons learned and my knowledge as a financial expert, I will do all I can to contribute to the realization of dynamic and effective corporate governance from a position of integrity and fairness, which in turn will contribute to sustainable growth and the enhancement of corporate value over the medium to long term.

Yutaka Endo
Newly appointed
Outside Audit & Supervisory
Board Member

Skills Matrix

We will realize medium- to long-term profit expansion and continuous corporate value enhancement through each corporate director and Audit & Supervisory Board member, who have demonstrated their skills in Global Business, Governance, Sustainability, and others listed below as determined by the Nomination Committee and the Board of Directors.

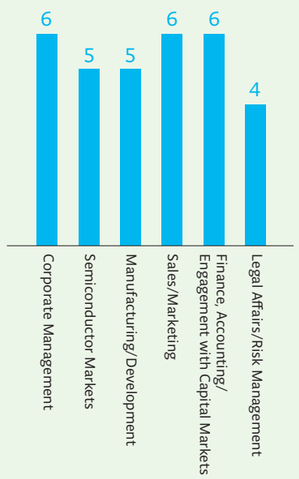
	Name			Expected Skills					
				Corporate Management	Semiconductor Markets	Manufacturing/ Development	Sales/Marketing	Finance, Accounting/ Engagement with Capital Markets	Legal Affairs/Risk Management
Corporate Directors	Toshiki Kawai	Re appointed		●	●	●	●		
	Sadao Sasaki	Re appointed		●	●	●	●		
	Yoshikazu Nunokawa	Re appointed			●	●	●	●	
	Michio Sasaki	Re appointed	Outside	●		●	●		
	Sachiko Ichikawa	Re appointed	Outside					●	●
	Joseph A. Kraft Jr.	Newly appointed	Outside					●	●
	Yukari Suzuki	Newly appointed	Outside	●			●		
Audit & Supervisory Board Members	Kazushi Tahara			●	●	●	●		
	Yutaka Nanasawa				●			●	
	Kyosuke Wagai		Outside					●	●
	Ryota Miura	Re appointed	Outside						●
	Yutaka Endo	Newly appointed	Outside	●				●	

Definition of Expected Skills and Reasons for Nomination

Corporate Management	Experience of corporate management (experience serving as a representative director or chairman/president) is necessary to fulfill the supervisory function of the Board of Directors and achieve "offense × offense" governance.
Semiconductor Markets	Knowledge of the semiconductor markets is necessary to further promote aggressive management in the semiconductor production equipment industry which is characterized by rapid technological innovation and dynamically changing market.
Manufacturing/ Development	Knowledge/experience in manufacturing and development at TEL and other manufacturers are necessary to strengthen research and development capabilities based on technological trends and customer needs, and to establish environmentally considerate and efficient manufacturing operations.
Sales/Marketing	Knowledge/experience in sales and marketing at TEL and other manufacturers are necessary to be the sole strategic partner for our customers and contribute to further value creation through proposing optimal solutions.
Finance, Accounting/ Engagement with Capital Markets	Knowledge in financial accounting and M&A, or knowledge/experience in engagement with capital markets are necessary to formulate and execute growth and financial strategies, improve capital efficiency, and further enhance shareholder value through shareholder returns.
Legal Affairs/Risk Management	Knowledge of legal affairs, compliance, and risk management is necessary to appropriately respond to increasingly complex and diverse risks throughout the Group as opportunities for business growth.

Expected Skills of Corporate Directors and Audit & Supervisory Board Members

(Unit: persons)



Directors, Audit & Supervisory Board Members and Corporate Officers (As of July 1, 2024)

Directors

Toshiki Kawai
Representative Director
President & CEO
Corporate Officer

Sadao Sasaki
Representative Director
Senior Executive Vice President
Corporate Officer
Chairman & Representative Director, Tokyo Electron Technology Solutions Ltd.

Yoshikazu Nunokawa
Corporate Director
Chairman of the Board of Directors

Michio Sasaki
Outside Director
Director and Vice President, SHIFT Inc.

Sachiko Ichikawa
Outside Director
Partner, Tanabe & Partners
Outside Director, OLYMPUS CORPORATION
Outside Director, Azbil Corporation
Director, The Board Director Training Institute of Japan

Joseph A. Kraft Jr.
Outside Director
CEO, Rorschach Advisory Inc.
Outside Director, Sony Group Corporation

Yukari Suzuki
Outside Director
Outside Director, SECOM CO.,LTD.

Audit & Supervisory Board Members

Kazushi Tahara
Audit & Supervisory Board Member

Yutaka Nanasawa
Audit & Supervisory Board Member

Kyosuke Wagai
Outside Audit & Supervisory Board Member
Representative, Wagai CPA Office
Outside Audit & Supervisory Board Member, Mochida Pharmaceutical Co., Ltd.

Ryota Miura
Outside Audit & Supervisory Board Member
Partner, Miura & Partners Legal Profession Corporation
Outside Director (Audit & Supervisory Committee Member), TECHMATRIX CORPORATION
Outside Director, Eisai Co., Ltd.

Yutaka Endo
Outside Audit & Supervisory Board Member

Corporate Officers

Tatsuya Nagakubo

Seisu Ikeda

Yoshinobu Mitano

Takeshi Okubo

Keiichi Akiyama

Hiroshi Ishida

Roundtable with the Chairman and Outside Directors

Michio Sasaki
Outside Director
Nomination Committee Chairperson
Compensation Committee Chairperson

Sachiko Ichikawa
Outside Director
Nomination Committee Member

Yoshikazu Nunokawa
Chairman of the Board of Directors
Nomination Committee Member
Compensation Committee Member

Ryota Miura
Outside Audit & Supervisory Board Member

Kyosuke Wagai
Outside Audit & Supervisory Board Member

At Tokyo Electron, corporate governance is regarded as important for achieving success in global competition and realizing sustainable growth. The Chairman of the Board of Directors and outside directors discussed about the evaluation of initiatives for "offense × offense and governance," the effectiveness of the Nomination Committee, and issues toward further corporate value enhancement.

How would you rate "offense × offense governance"?

Nunokawa While many companies see governance as a defense and business strategies as offense, we are one step ahead and strategically implement governance aggressively. We call this approach "offense × offense governance" and are working to improve its effectiveness. In fiscal 2024, we undertook activities and generated results that sought to entrench awareness among the management and employees regarding safety, quality, compliance, Diversity, Equity and Inclusion (DE&I) and engagement with our employees and stakeholders. Endless improvement and structural enhancement are important for risk management, which includes information security. In particular, we convey Safety, Quality, and Compliance with emphasis within Tokyo Electron, and ensure thoroughness in confirmation and reporting. For example, we explain to all employees the significance of the target value of 0.10 or lower for the number of workplace incidents per 200,000 work hours (total case incident rate, or TCIR) and get their acceptance to spread understanding at our sites.

Sasaki Regarding the entrenchment of awareness, communication from top management is undertaken repeatedly, such as through employee meetings that include overseas sites, management meetings, and Medium-term Management Plan progress meetings held every three months. Amid extremely rapid changes, the future issue would be to enhance our sensing capabilities for understanding the ever-changing situation—such as research that predicts changes in the external environment and the method of distributing weightage for key fields—to make correct decisions and create an organization that can flexibly respond according to the changes.

Wagai The mindsets of our employees form the basis for various measures to function. We should acknowledge the aggressive organization reforms being undertaken to agilely implement "offense × offense governance," including the establishment of a Corporate Officer system separate from the Board of Directors with clear functions for responsibility over execution; the organizational restructuring of corporate departments and establishment of new corporate departments; and the appointment of division officers.

Ichikawa We can highly rate the initiatives for "offense × offense governance." As security and compliance issues may occur in unexpected areas, we need an even more aggressive stance. We must take our responses one step further without remaining on the extension of current efforts and also actively respond to new issues.

Miura As an Audit & Supervisory Board Member, I collaborate daily with various parties relevant to the Group, including our independent auditor and legal, intellectual property and other departments. I think there is no issue with our system and management. However, we need a more aggressive stance as governance and risk management are efforts that require continuous hard work with no final goal. For example, in regard to bad news first, I think we are comparatively fast in providing information, but I look forward to a system that allows even faster notifications.

What are the achievements of the Nomination Committee and its issues?

Sasaki In preceding fiscal year, we held 10 Nomination Committee meetings and mainly discussed repeatedly about the CEO succession plan and outside director candidates. Regarding the CEO succession plan, we discussed candidates and development plans that also considered the timeline. I cannot say it is adequate and we need a systematic and continuous approach. As for the two outside director candidates this time, we selected candidates from the perspective of experience in corporate management, capital markets, risk management and management at a global scale.

Ichikawa During the previous evaluation of the effectiveness of the Board of Directors, the Nomination Committee pointed out the lack of transparency in the CEO succession plan and the inadequate number of outside director candidates. This is proof of effective governance, and we accept the pointers with appreciation. With this in mind, we sorted out the concept for our skills matrix, and defined the list creation method and filtering procedures to enhance the list of candidates being developed by the Nomination Committee. We also confirmed the detailed timelines for the selection of management candidates.

Miura The securing and development of human resources is a common issue that becomes a major theme for any company's board of directors. In particular, the CEO succession plan is the most difficult issue for a company. There are things that can and cannot be shared by the Nomination Committee, but it would be good if specific information about matters such as recruitment and development processes and results could be shared with members of the Board of Directors. The issue is how to carry out information collaboration as executives perform their three respective roles of nomination, compensation, and audit.

What are the issues for further enhancement of corporate value?

Ichikawa The semiconductor industry is achieving significant growth globally, and we take pride in our steady performance in a market with high barriers to entry. However, our competitors are extremely strong in an oligopolistic market, and it is expected that competition will become even more intense going forward. Furthermore, the speed of technological innovation is fast, and we may see the sudden appearance of a game changer. Under such circumstances, it is necessary for us to refine our ability to discern in developmental fields and actively incorporate new technologies in M&A and other aspects. We also need to secure highly skilled human resources from other industries and build an organizational structure with diversity that applies their capabilities.

Sasaki It is important to invest in new technologies and business in our long-term strategy. To give birth to technological innovations that cannot be imitated by others, we need to discuss concentration and distribution with ultra-long-term prospects and taking into consideration changes in the external environment. The key is to carry out flexible investment decisions in distributed technological development and concentrate on promising technologies.

Miura We understand that whether we can manufacture products with high added value sought by semiconductor manufacturers—our customers—will affect our growth. Therefore, the selection of recipients for investment in research and development as well as the securing and development of human resources are issues for enhancement of our corporate value. It is important to strike a balance between having a view of ultra-long-term prospects and properly working on the tasks at hand.

Wagai As a leading global company, it is our mission to simultaneously achieve both enhancement of corporate and social value and create sustainable circulation. Therefore, it is important to steadily work on key indicators based on our material issues and disclose the results of such efforts.

Nunokawa Net zero and sustainability initiatives will drive further enhancement of corporate value. Making semiconductors consume lower power will be crucial in limiting the increase in global electricity demand. As a leader in the semiconductor production equipment industry, we will aim for net zero emissions together with all stakeholders. Our outside directors have a proper understanding of Tokyo Electron, and I am happy to hear their opinions based on thought given to our future. I look forward to your continued support.

Engagement with Capital Markets

Our management actively engages in IR (Investor Relations) and SR (Shareholder Relations) activities to contribute to our sustainable growth and increase corporate value over the medium to long term.

In terms of IR activities, the CEO and each company's executive appear at quarterly financial announcement and the Medium-term Management Plan briefings to share our business strategies and growth story with stakeholders and institutional investors. We have also established the IR Department, within the Corporate Strategy Division, to enable deeper discussions with our investors. In fiscal 2024, we established an IR brunch in New York, which increased opportunities for face-to-face dialogue with investors in North America and increased awareness of us and Japan's semiconductor production equipment industry.

As a part of our SR activities, company executives play a central role in constructive dialogue with our major investors and proxy advisory firms. In addition to explaining the Shareholders' Meeting agenda in advance, we engage in repeated dialogue throughout the year on a wide range of topics, including policies on corporate governance and sustainability, and initiatives for the environment, human rights and DE&I, and we work to deepen mutual understanding. Opinions gathered from dialogues with investors are regularly reported to management and the Board of Directors.

Main Activities

Engagement with Capital Markets[1]	IR Activities	• Individual meetings for institutional investors: 809 times in total (528 times at Tokyo headquarters, 201 times at our New York site, and 80 times[2] elsewhere) • Overseas IR road shows[3]: 10 countries and regions • Tours of plants: 13 times
	SR Activities	• Individual meetings for institutional investors: 23 times
Provision of Information	Financial Announcement Medium-term Management Plan Announcements	• Broadcasting using simultaneous interpretation and subtitles • Broadcasting of archives from announcements/conferences within one business day; disclosure of Q&A within two business days
	Shareholders' Meeting	• Posting of convocation notices on the website and dispatch of convocation notices at an early stage
Disclosure of Materials	IR-related	• Consolidated Financial Statements, Integrated Report, Fact Book (each once per year) • Quarterly Report, Earnings Release, Financial Announcement Materials, Corporate Update (each 4 times/year)

1 Fiscal 2024 2 Including tours of plants and overseas IR road shows 3 Overseas IR road shows: IR activities presented directly to shareholders and investors

Compliance

Approach to Compliance

As an industry leader, we regard business ethics and compliance as important values. Compliance—like safety and quality—is the basis for corporate reliability and sustainable growth. It requires a strong sense of ethics and integrity in individual and organizational behavior, not to mention compliance with laws and regulations. In addition to strengthening systems for raising awareness about compliance and changing behavior in order to prevent compliance violations, we promote effective programs. These efforts will support the enhancement of our corporate value.

Compliance System

In order to effectively promote compliance programs that are expected of a global company, we have appointed a Chief Compliance Officer (CCO) and established a dedicated Compliance Department at our headquarters. We have also appointed Regional Compliance Heads at key overseas sites, and have established a framework for direct reporting to the CCO and Compliance Department.

Compliance Initiatives

Business Ethics and Compliance

To more effectively instill and promote business ethics and compliance, we have formulated the Tokyo Electron Group Code of Ethics as a code of conduct for all executives and employees and established the Business Ethics Committee. We have set up the Disciplinary Committee as a subordinate organization of the Business Ethics Committee to ensure the implementation of reasonable and appropriate disciplinary action and proper procedures. In addition, through regular meetings with each of the Group companies, we discuss and implement measures to promote compliance.

We have also set up an award system for employees who have engaged in particularly excellent activities relating to business ethics and compliance, to raise awareness within the Group and fostering a compliance-oriented culture.

Initiatives for Anti-bribery and Corruption and for Competition Laws

We have globally established the Basic Policy on the Prevention of Bribery and Corruption and the Guidelines for Gift, Hospitality and Entertainment in the area of anti-bribery and corruption, and the Basic Policy on Competition Law Compliance and Guidelines in the area of competition laws. To prevent violations, we regularly conduct activities to foster awareness, and we are committed to promoting understanding and instilling these Policies and Guidelines.

Internal Reporting System

We have established an internal reporting system that allows employees to safely and securely raise concerns and seek redress outside the chain of command, and to report and discuss any behavior that is, or may be, in violation of laws, regulations, or business ethics. This system ensures complete confidentiality, anonymity and the prohibition of retribution and unfavorable treatment. An internal leniency system has also been introduced, whereby any disciplinary action may be reduced or exempted in the event that an employee involved in a compliance violation has made a report or sought advice on their own volition. This encourages employees to proactively provide information and leads to problems being discovered and resolved at earlier stages.

As part of this internal reporting system, we have established and are operating the Tokyo Electron Group Ethics & Compliance Hotline—a global common internal point of contact that uses a third-party system and is also accessible to our suppliers and retirees—as well as an external point of contact that allows direct consultation with an outside law firm. The internal point of contact can be accessed via phone or a dedicated website 24 hours a day, 365 days a year, and accommodates all languages used by employees.

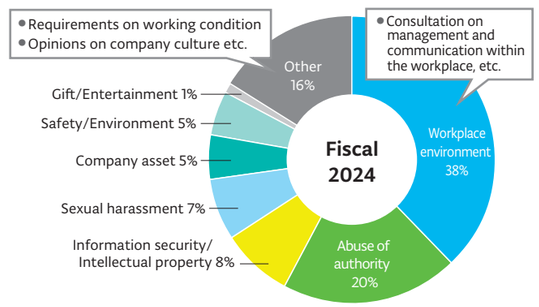
Reports and consultations received via these points of contact are handled with sincerity and investigations are undertaken in accordance with internal regulations. If a compliance violation is found, disciplinary actions in accordance with the Rules of Employment, corrective measures such as improvements to the workplace environment and preventive measures are implemented as necessary.

In fiscal 2024, a total of 110 reports and consultations were received via the internal reporting system, of which 16* were recognized as compliance violations. The reports and consultations primarily related to the workplace environment, including harassment. Based on the results, we continue to conduct regular education programs for our employees with the goal of preventing harassment, and we provide thorough follow-up with those concerned or involved. The CCO also provided compliance training for managers, which included the importance of establishing an open work environment.

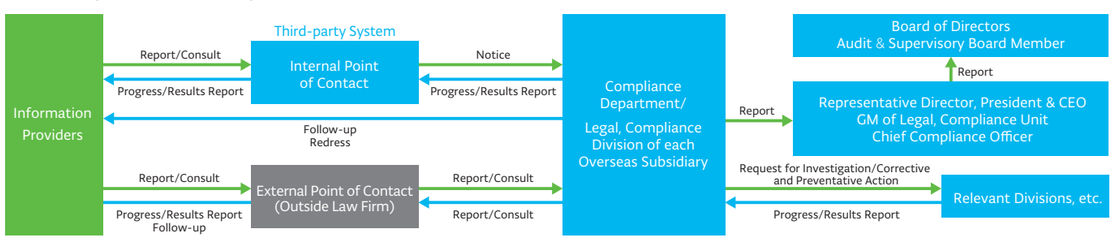
There were no reports or cases of violations of laws/regulations in our operations that could have had a serious impact on our business or on local communities.

* There were no cases filed or prosecuted by the authorities

Breakdown of Report/Consultation Contents



Global Response to Internal Reports



Risk Management

Approach to Risk Management

Our Group has built and developed a risk management system to respond effectively and promptly to various risks, such as geopolitical and market changes in the semiconductor industry, and to ensure sustainable growth. We believe that it is important not only to minimize the impact of potential risks that may arise during business operations, but also to view these risks as potential business opportunities and address them in a manner that earns the trust of society.

Risk Management System and Implementation

In April 2024, we established the Corporate Project & Risk Management Office (CPRO) at the head office as a strategic department directly reporting to the CEO to promote more effective risk management. We are actively working toward advancing enterprise risk management[1].

To address major risks in our business activities, we have implemented the following PDCA cycle throughout the entire Group.

1. The CPRO and the departments responsible each business activities, together to comprehensively identify various risks in our business activities, such as related to compliance, human resources and labor, and business continuity, based on their degree of impact on the Group and likelihood, identify 12 risk items, and appoint risk owners for each.
2. The 12 identified risk items are discussed and shared at the Risk Management Committee, which includes each risk owner.
3. Recognizing that mitigating risks directly presents opportunities for improving business performance, quarterly review meetings involving the CEO and each division officer are held to review the progress of efforts on issues that are particularly problematic among the 12 risk items and discuss improvement measures.

The Group's risk management activities are regularly reported to the Board of Directors, which oversees various initiatives implemented by each risk owner. To continue practicing autonomous and highly effective risk management, we will carry out group-wide agile operations.

Additionally, we are also continuing to focus on the revision and operational improvement of our BCP for all Group companies, and we regularly conduct BCP drills and disaster drills to foster the practical ability to ensure the continuation of business operations in the event of an emergency.

Furthermore, we are actively promoting digital transformation in our risk management activities, and have been introducing GRC tools[2] that utilize digital technology since fiscal 2023. This introduction has made it possible to visualize the assessment of risks and response measures across the entire Group as well as to conduct global, cross-sectional information sharing between each owner and each responsible department.

To continue practicing autonomous and highly effective risk management, each owner will implement activities to further strengthen risk management for the 12 risk items across the entire Group.

1 Enterprise risk management: Group-wide systems and processes related to risk management activities
2 GRC tools: A system that contributes to managerial decision-making in a timely manner by systematically organizing multi-layered and complex corporate management functions and management information collected through the integration of Governance, Risk and Compliance (GRC) measures related to corporate activities

Risk Management Initiatives

We have begun assessing the current risk management state, identifying and examining mitigation measures for not only known and unknown risks that may surround the Company in the future, but also emerging risks from a medium- to long-term perspective. As for fiscal 2024, the 12 risks identified to date were reviewed and reevaluated from the perspective of their potential to have a significant impact on our operating results, financial condition and cash flow. We then pushed forward risk management initiatives for each identified risk even further.

12 Risks

Item	Main Potential Risks	Main Risk Management Initiatives
1 Market Fluctuations	• A rapid contraction of the semiconductor market could lead to overproduction or an increase in dead inventory • A sharp increase in demand could lead to an inability to supply customers with products in a timely manner, resulting in lost opportunities	• Periodically review market conditions and orders received at the Board of Directors and other important meetings, and appropriately adjust capital investments, personnel/inventory planning and other aspects of business • Establish a dedicated division to work closely with a wide range of customers around the world and to quickly identify their needs and capital spending trends. Through these efforts and others, we strive to strengthen our sales framework and further improve our customer responsiveness
2 Research and Development	• Delays in the launch of new products or the mismatch of such products with customer needs could lead to a decline in the competitiveness of products	• Establish the Corporate Innovation Division and build a Group-wide development framework that integrates innovative technology development with the technologies of each development division • Provide highly competitive next-generation products ahead of competitors by collaborating with research institutions and sharing a technology roadmap that span multiple generations with leading-edge customers
3 Geopolitics	• Geopolitical tensions and regional conflicts that influence international order and global macroeconomic conditions can affect the national security, diplomatic, industrial or environmental policies of countries and regions. This could in turn lead to supply chain disruptions or deterioration of the macroeconomic environment, restricting the Company's ability to operate business	• Carefully monitor the international situation as well as the diplomatic and security measures and industrial policy trends in each country and region • Analyze the implications on our business of regulations concerning product exports and imports and technological development and changes in the macroeconomic environment while actively engaging in dialogues with the policy-making authorities, industry groups and experts in various fields, and consider countermeasures in advance
4 Procurement, Production and Supply	• Interruptions in the Company's production due to natural disasters, delays in component procurement stemming from deterioration of suppliers' business conditions, increased demand that exceeds suppliers' supply capacities, changes in laws and regulations, a shrinking working population or other factors, and strains on domestic or international logistics networks could lead to delays in the supply of products to customers	• Develop BCP, such as by establishing alternate production capabilities, seismically reinforcing our plants, promoting production leveling, maintaining backups of information systems, developing multiple sources of important components, and maintaining an appropriate level of inventory • Share forecasts based on demand projections for semiconductors with suppliers and build a system for the stable supply of products
5 Safety	• Safety problems with the Company's products or serious accidents resulting in workplace injuries could lead to damage to customers, liability for damages and a decline in public trust and confidence in the Company's safety initiatives	• Based on the "Safety First" approach, we implement thorough safety design at the product development phase with risk reduction in mind • By conducting risk assessments such as frontline workers' hazard prediction meetings, we implement company-wide efforts such as identifying potential risks and implementing preventative or mitigation measures, promoting safety through in-house competency qualification and safety training programs that are designed according to job requirements and developing an accident reporting system
6 Quality	• The occurrence of a product defect could lead to liability for damages, costs for countermeasures and a decline in the Group's brand and credibility	• Promote continuous education on quality to employees and suppliers to establish a quality assurance system and a world-class service system • Resolve technical issues from the product development and design stage • Thoroughly investigate the cause of any defects and implement measures to prevent the same or similar defects from occurring • Monitor the quality status of suppliers, conduct audits and provide support for improvement
7 Environmental Issues	• The inability to respond appropriately to each country's climate change policies, environmental laws and regulations, and customer needs could lead to additional related costs such as for developing new products or changing specifications, as well as to reduced product competitiveness and diminished public confidence in the Company	• To achieve industry leading medium- to long-term environmental goals that include the net zero target, implement measures such as reducing greenhouse emissions from the use of our products, increase the rate of renewable energy usage at plants and offices, reduce overall power consumption, review packaging materials, and promote a model shift • Provide technologies, etc., that contribute to higher performance and energy efficiency of semiconductor devices through implementation of our E-COMPASS initiative
8 Laws and Regulations	• Violations of the laws and regulations of the countries and regions where the Company operates could lead to diminished public confidence in the Company, fines, liability for damages or restrictions on business activities	• Monitor compliance activities at key sites in and outside Japan under the direction of the Chief Compliance Officer • Have assessments conducted by external experts and report identified issues to the CEO, the Board of Directors and the Audit & Supervisory Board for swift and effective action
9 Intellectual Property Rights	• The inability to obtain exclusive rights to proprietary technologies could lead to reduced product competitiveness • Infringement of the intellectual property rights of third parties could lead to restrictions on the production and sale of products as well as liability for damages	• Advance the intellectual property strategy, business strategy and R&D strategy in an integrated manner to build an appropriate intellectual property portfolio • Reduce the risk of infringement of other companies' patents by continuously monitoring other companies' patents and establishing a system to take appropriate measures in cooperation with the business and R&D departments
10 Information Security	• Cyberattacks, internal fraud and other incidents against the Company or suppliers that cause data breaches or service disruptions could result in a loss of our competitiveness or technological superiority, interruptions of our manufacturing and other operations, diminished public confidence in us and damage claims	• We strive to properly manage and protect our information assets through establishing a global security policy, educating and training employees to increase awareness, while implementing cybersecurity solutions, security monitoring, and safeguards against internal fraud and other technical and operational measures • We have established an Information Security Committee to strengthen our Group-wide security posture and are working to further enhance the effectiveness of our information security measures, including through internal audits and assessments by external agencies
11 Human Resources	• The inability to recruit and retain necessary human resources on an ongoing basis or the inability to create an environment where people with diverse values and expertise can play an active role could lead to diminished product development capability or customer support quality	• Make continuous improvements to work environments and promote diverse work styles as well as health and productivity management (e.g., sharing our visions by management, establishing training plans for human resource who will lead the future, visualizing career paths for employees and offering attractive remuneration and benefits) • Fostering semiconductor talent through collaborative efforts between industry, government, and academia as well as strengthening our partnerships with academic institutions globally
12 Other Risks Such as Infectious Diseases and Natural Disasters	• In addition to economic conditions, financial and stock markets, and foreign exchange rates, earthquakes, typhoons, heavy rains, floods and other natural disasters, and pandemics could cause the Company's business activities to stagnate and the global economy to deteriorate	• In addition to taking appropriate measures against each risk, in case of a potential impact on the continuation of the business, establish an Emergency Task Force headed by the CEO and implement measures to minimize the impact

Information Security

We view the assurance of information security as an important managerial issue, and appropriately protect confidential information primarily concerning information on our customers and suppliers as well as information on leading-edge technology. In addition, we strive to strengthen information security to ensure the stable operation of the entire supply chain.

Main Activities

Information Security Systems
We designate Information Security GMs, Managers, and Promoters at the Head Office and each Group company in Japan and overseas. We are working to strengthen security by collaborating through multiple discussions internally in each company, or according to each function, so that the entire Group will hold a common recognition of the issue.

Information Security Countermeasures
For fiscal 2024, we have redefined information security risks, built a company-wide framework called the Security Development Goals, and set Medium-term Management Plan goals for information security.

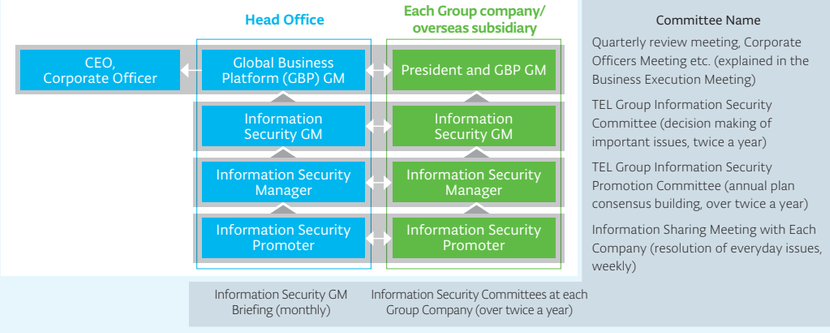
Information Security Management
We identify information assets each year and implement risk assessments for each department, evaluate risks and undertake improvement activities for technological, human, organizational and physical security measures. Furthermore, we strive to improve awareness about information security by conducting security education and phishing email training regularly for all executives and employees, and through the distribution of a newsletter. Furthermore, from fiscal 2025, we will gradually aim to obtain ISO/IEC 27001 certification, an international standard for information security management.

Cyber Security Countermeasures and Internal Fraud Countermeasures
We established and operate a monitoring and incident response system and implemented industry-standard cybersecurity solutions to defend against cyberattacks such as ransomware and combat internal fraud, including industrial espionage. In fiscal 2024, we implemented measures such as strengthening network security, conducting penetration tests[1] for our external websites, introducing endpoint security[2] solutions, and bolstering monitoring levels.

Security at Manufacturing Sites and in Products
We are strengthening security at our manufacturing sites through operations such as the introduction and monitoring of necessary solutions to ensure the safe and stable operation of the manufacturing sites. Furthermore, we will strive to ensure product security that contributes to the stable operation of our customers' plants by implementing security measures based on industry standards, including cybersecurity standards E187/E188 defined by SEMI, and the laws and regulations of each country, such as the EU Cyber Resilience Act, for the products we deliver to our customers.

Supply Chain Security
We conduct risk assessments on our suppliers and work on enhancing security in the entire supply chain by making improvements with our suppliers on identified issues.

Collaboration with External Security Organizations and Strengthening Human Resources
Organized by SEMI, the Semiconductor Manufacturing Cybersecurity Consortium was established in December 2023 with the participation of information security departments from companies in the semiconductor industry. In addition to being selected as a member of the steering committee, we participated in discussions in various working groups and gave a talk at SEMICON Japan. In the future, we also plan to give talks and participate in meetings at overseas events. While working to increase the number of employees with information security qualifications through technical training and recruitment of specialized personnel to strengthen the organization's human resources, we are participating in the Nippon CSIRT Association[3] to further study information security.



Committee Name

Quarterly review meeting, Corporate Officers Meeting etc. (explained in the Business Execution Meeting)

TEL Group Information Security Committee (decision making of important issues, twice a year)

TEL Group Information Security Promotion Committee (annual plan consensus building, over twice a year)

Information Sharing Meeting with Each Company (resolution of everyday issues, weekly)

1 Penetration test: A test method for verifying vulnerabilities in networks, PCs, servers and systems
2 Endpoint security: Security measures to protect terminals connected to the Internet, internal LANs, and virtual environment terminals from cyberattacks
3 Nippon CSIRT Association: The Nippon Computer Security Incident Response Team Association, an organization that promotes close cooperation between teams and contributes to resolving problems

Evaluation from Third-party Institutions

Our sustainability initiatives have allowed us to continue to be selected as a constituent stock under leading global ESG indices. Some examples are, the Dow Jones Sustainability™ Asia/Pacific Index, FTSE4Good Index Series[1], MSCI ESG Leaders Indexes[1], Euronext Vigeo World 120 Index and STOXX Global ESG Leaders indices. We were evaluated as a Low Risk company in Sustainalytics' ESG Risk Ratings[2], continuing from the previous year. In April of 2024, we were also selected as an SX Brand[3] as a progressive company that engages in long-term and sustainable corporate value.

The Tokyo Electron Integrated Report 2023 was selected again as an "Excellent Integrated Report" by the Government Pension Investment Fund (GPIF)'s external asset managers entrusted with domestic equity investment for the third consecutive year, and we were selected for the Excellence Award at the Third NIKKEI Integrated Report Award.

1 Logo's disclaimer: "Third-party Recognition" on our website www.tel.com/sustainability/review.html
2 Copyright ©2024 Sustainalytics. All rights reserved. This article contains information developed by Sustainalytics (www.sustainalytics.com). Such information and data are proprietary of Sustainalytics and/or its third party suppliers (Third Party Data) and are provided for informational purposes only. They do not constitute an endorsement of any product or project, nor an investment advice and are not warranted to be complete, timely, accurate or suitable for a particular purpose. Their use is subject to conditions available at https://www.sustainalytics.com/legal-disclaimers.
3 SX Brands: Brands established by the Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange in 2024

Participation in Global Initiatives

We actively participate in a variety of global initiatives and practice sustainability in our business activities.

We signed onto the United Nations Global Compact (UNGC) in 2013 and are working to contribute to the realization of sound globalization and a sustainable society in accordance with its Ten Principles.

We joined the Responsible Business Alliance (RBA) in 2015, and we work together with suppliers to ensure compliance with the RBA Code of Conduct comprised of "labor", "environment", "health and safety", "ethics" and "management systems".

In 2020, we expressed our approval of the recommendations offered by the Task Force on Climate-related Financial Disclosures (TCFD)[1] and are conducting disclosures based on the framework of governance, strategy, risk management and metrics and targets relating to the risks and opportunities that climate change presents to our overall business.

We concur with the vision of the Taskforce on Nature-related Financial Disclosures (TNFD) and in 2023, joined the TNFD Forum, which appropriately evaluates risks and opportunities related to natural capital and biodiversity.

We joined a global industry association, SEMI[2] which aims for the global development of the semiconductor industry, in 1978 as a member company, and engage in the promotion of the establishment and standardization of international guidelines as well as the promotion of sustainability.

1 Initiatives Related to Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) P. 55-56
2 SEMI: Semiconductor Equipment and Materials International

Chapter 4 Toward Further Growth

Medium- to Long-term Outlook

Evolution of Technology and Future of Semiconductors

In recent years, the practice use of innovative technologies has further accelerated the digitalization of the society and computer technology to perform information processing has been further evolved as well. In addition to the increase of data traffic caused by the expansion of services and platforms using the Internet, applications that require a large scale of computation such as AI, autonomous driving and virtual reality[1] become technology drivers and the market is expected to further grow.

This trend is supported mainly by semiconductors. Technology evolution and demand increase of leading-edge semiconductors used for smartphones, PCs and servers in data centers as well as devices for MAGIC[2] supporting a data-driven society such as IoT are driving the semiconductor market size in the world to exceed US$1 trillion in 2030, and the semiconductor and related industries including production equipment are expected to grow strongly in the future as well.

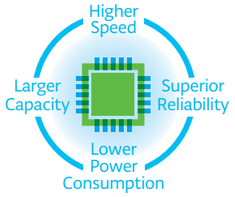
1 VR (Virtual Reality), AR (Augmented Reality), MR (Mixed Reality) included.

2 Expansion into the Diversified Semiconductor Market P. 40

Semiconductor Market

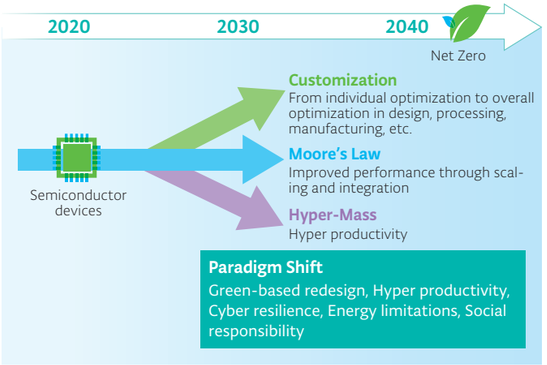
Source: 1990-2023 (WSTS)/ 2024-2030 (IBS, May 2024)

While the semiconductor industry has a large growth potential, there is an issue of electric power consumption in computing. If power consumption continues to grow at the current pace exponentially, the demand may exceed the supply, causing power shortage worldwide in the near future. In addition, as the demand for electric power increases, there is the worry that global environmental preservation might be affected such as by the increase of greenhouse gas emissions. For the development of a digital society, lower power consumption of semiconductors is essential in addition to higher semiconductor speed, larger capacity and superior reliability.



Semiconductors, which support the lives of people, are expected to evolve in more diverse ways, going forward. The performance of semiconductors has been improved through scaling and integration, but the demand for further performance improvement to realize computer technology that can process large amounts of data at higher speed and with lower power consumption is increasing (Moore's Law). In addition, with the diversification of applications and services, it is necessary to optimize semiconductor design, manufacturing technology and the entire system according to the application (Customization). Furthermore, larger capacity data traffic and their processing and analysis require an enormous amount of semiconductors. To realize a world in which everyone can enjoy the benefits of computer technology, it is necessary to reduce the cost of semiconductors through economies of scale (Hyper-Mass).

While various paradigm shifts in the market are expected to happen in the medium term, the key to value creation in the future for semiconductor production equipment manufacturers will be to solve the technological and cost challenges of scaling and integration, to quickly propose the best solutions to meet the diverse needs of customers and to provide manufacturing methods that achieve extremely high productivity and optimize environmental impact.



Development of Semiconductor Production Equipment

Toward the US$1 trillion era and beyond, semiconductor production needs to solve issues such as advanced technology for device structures and integration, cost and time for development and production, human resource shortage and increased processes. In such a situation, it is considered important for an equipment manufacturer to provide solutions based on digital transformation (DX) that makes full use of AI and digital technology.

Going forward, a key in equipment development will be digital twins, which integrate various simulations and make digital prototypes in cyber space. Currently, repeating trial and error processes using real prototypes is a common practice, requiring a lot of resources and labor. Creating prototypes by digital twins instead of making real prototypes allows optimal design to be completed quicker with less effort.

Another keyword for equipment used for the mass production of devices is "autonomy." Each equipment senses various data from temperature, pressure to processing conditions and performs analysis using AI under the control of its operator. When process conditions change, adjustment to maintain the process quality is completely automated such as by autonomously recovering the optimal conditions.

In addition, time lags in engineers reaching the sites are an issue in maintenance and management, and remote operation is a solution to this. When an equipment fault occurs, an engineer visually checks the situation via an AR glass and the like and performs operations using gestures, and a robot on-site is synchronized with them and performs repair, adjustment and parts changing work. Problems can be handled via virtual space, allowing timely handling irrespective of the time and location.

Digital Twin

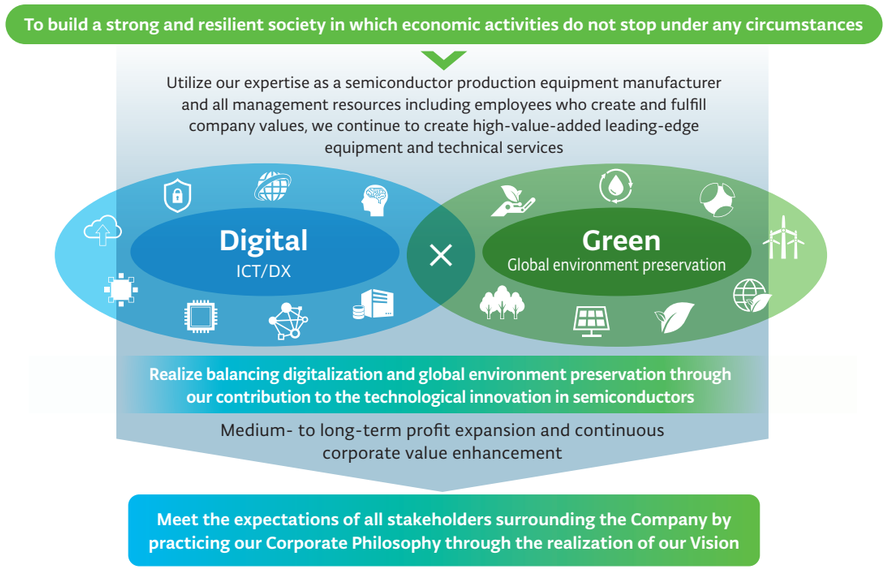
Remote Operation

Aiming to Be a Company Filled with Dreams and Vitality

The world continues to push firmly ahead with implementing ICT (information and communication technology) as well as taking action to realize decarbonization in order to build a strong and resilient society in which economic activities do not stop under any circumstances.

Utilizing our expertise as a semiconductor production equipment manufacturer and all management resources including employees who create and fulfill company values, Tokyo Electron continues to create high-value-added leading-edge equipment and technical services. And to surely assume our roles and responsibilities in society, we will help realize a digitalization and global environment preservation through our contribution to the technological innovation in semiconductors.

We work hard to expand medium- to long-term profit and to continuously enhance our corporate value, leading to the practice of our Corporate Philosophy through the realization of our Vision, and will meet the expectations of all stakeholders surrounding the Company.



Financial Review

Operating Results

With respect to the global economy in fiscal 2024, raw material and energy prices that had soared since the advent of the COVID-19 pandemic began to fall during the previous fiscal year. As a result, the inflation rate had fallen to around 2% by the end of the current fiscal year, which is the medium- to long-term target of central banks in major countries. Furthermore, although the increase in policy interest rates, mainly in Europe and the United States, has eased slightly, the yen's depreciation continues.

In the electronics industry, where the Tokyo Electron Group operates, semiconductor manufacturers began to reduce production from the second half of the previous consolidated fiscal year as demand for end products such as PCs and smartphones had peaked. As a result, inventory adjustments have progressed, and the supply-demand balance for semiconductors has gradually improved during fiscal 2024.

Under these circumstances, capital investment in semiconductor production equipment, which was entering an adjustment phase, showed signs of bottoming out. Although capital investment for memory and cutting-edge logic/foundry semiconductors was still generally restrained, there was an increase in inquiries about advanced package equipment for generative AI applications. Additionally, capital investment in China, which aims to improve their semiconductor self-sufficiency rate, for the mature generations of semiconductors used for IoT, automotive, and industrial applications, continued their strong growth trend from the previous fiscal year. Considering the transition to a data-driven society, stemming from the expansion of information and communication technology, and efforts toward realizing a decarbonized society, the role of semiconductors in supporting electronic devices and the importance of their technological innovation is increasing. Therefore, further growth is expected in the semiconductor production equipment market in the medium- to long-term.

The consolidated business results for fiscal 2024 under review are as follows.

Net sales for the fiscal 2024 decreased 17.1% from the previous fiscal year to 1,830.5 billion yen. Domestic net sales decreased 22.9% from the previous year to 184.9 billion yen, while overseas net sales decreased 16.4% to 1,645.5 billion yen to account for 89.9% of net sales.

Cost of sales decreased 18.3% to 1,000.2 billion yen and gross profit decreased 15.7% to 830.2 billion yen. As a result, the gross profit margin increased 0.8 points to 45.4%.

Selling, General and Administrative (SG&A) expenses increased 2.0% to 374.0 billion yen, while the ratio to consolidated net sales increased 3.9 points to 20.5%.

As a result, operating income decreased 26.1% to 456.2 billion yen and operating margin decreased 3.1 points to 24.9%.

Income before income taxes was 473.4 billion (year-on-year decrease of 24.2%) and net income attributable to owners of parent was 363.9 billion yen (year-on-year decrease of 22.8%).

As a result, net income per share was 783.75 yen compared to net income per share of 1,007.82 yen in the previous fiscal year.

From fiscal 2024 information by segment has been omitted, with the change of our reportable segments to a single segment of "Semiconductor Production Equipment."

Financial Conditions

The financial conditions at the end of fiscal 2024 under review are as follows.

Current assets at the end of fiscal 2024 were 1,700.4 billion yen, a decrease of 40.5 billion yen compared to the end of the previous fiscal year. This was mainly due to a decrease of 87.8 billion yen in prepaid consumption tax, a decrease of 73.4 billion yen in notes and accounts receivable - trade, and contract assets, and an increase of 110.7 billion yen in inventories.

Property, plant and equipment increased by 78.2 billion yen from the end of the previous fiscal year, to 337.3 billion yen.

Investments and other assets increased by 107.0 billion yen from the end of the previous fiscal year, to 418.6 billion yen.

As a result, total assets increased by 144.8 billion yen from the end of the previous fiscal year, to 2,456.4 billion yen.

Current liabilities decreased by 17.9 billion yen from the end of the previous fiscal year, to 611.8 billion yen. This was largely due to a decrease of 23.9 billion yen in trade notes and accounts payable, and an increase of 8.8 billion yen in income taxes payable.

Long-term liabilities increased by 2.2 billion yen from the end of the previous fiscal year, to 84.3 billion yen.

Net assets increased by 160.6 billion yen from the end of the previous fiscal year, to 1,760.1 billion yen. This was largely due to an increase of 363.9 billion yen resulting from recording net income attributable to owners of parent and a decrease resulting from the payment of 202.4 billion yen in year-end dividends for the previous fiscal year and interim dividends for fiscal 2024. As a result, the equity ratio was 71.1%.

Overview of Consolidated Cash Flows

Cash and cash equivalents at the end of fiscal 2024 decreased by 10.8 billion yen compared to the end of the previous fiscal year, to 461.6 billion yen. The combined balance including 10.9 billion yen in time deposits and short-term investments with maturities of more than three months that are not included in cash and cash equivalents was 472.5 billion yen, a decrease of 0.5 billion yen from the end of the previous fiscal year. The overall situation regarding cash flows for fiscal 2024 was as described below.

Cash flows from operating activities were positive 434.7 billion yen, an increase of 8.4 billion yen compared to the end of the previous fiscal year. The major positive factors were 473.4 billion yen in income before income taxes, an 88.0 billion yen decrease in prepaid consumption tax, and an 84.8 billion yen decrease in trade accounts receivable, and contract assets. The major negative factors were 118.9 billion yen in payment of income taxes, and a 97.7 billion yen increase in inventories.

Cash flows from investing activities were negative 125.1 billion yen compared to negative 41.7 billion yen in the same period of the previous fiscal year. This was largely due to the payment of 116.9 billion yen for the purchase of property, plant and equipment.

Cash flows from financing activities were negative 325.0 billion yen compared to negative 256.5 billion yen in the same period of the previous fiscal year. This was largely due to the payment of 202.4 billion yen in dividends, and the payment of 120.0 billion yen for the purchase of treasury stock.

Production, Orders and Sales Results

We conduct production activities while flexibly responding to market changes. As our production trends are similar to those of our sales, we omit description of these results. We also do not indicate order results because they are not necessarily an appropriate indicator for projecting medium-to long-term corporate performance, with short-term orders tending to fluctuate significantly according to customers' investment trends.

Sales results by major customer and their ratio to total sales results are as shown below.

Fiscal 2023 (Fiscal year ended March 31, 2023)

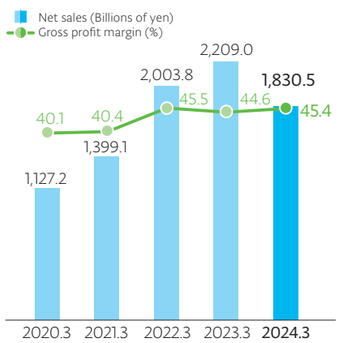
Name of Customer	Sales (Millions of yen)	Ratio (%)
Intel Corporation	357,636	16.2
Taiwan Semiconductor Manufacturing Company Ltd.	320,427	14.5
Samsung Electronics Co., Ltd.	275,916	12.5

Fiscal 2024 (Fiscal year ended March 31, 2024)

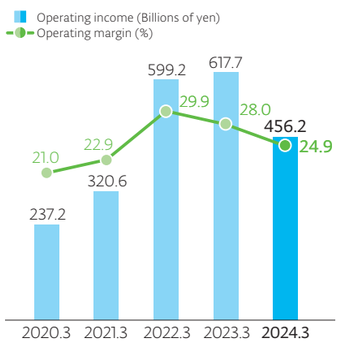
Name of Customer	Sales (Millions of yen)	Ratio (%)
Samsung Electronics Co., Ltd.	237,441	13.0

Note: The amounts include sales to the customer and its subsidiaries

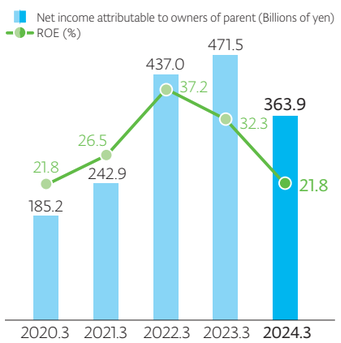
Net Sales and Gross Profit Margin



Operating Income and Operating Margin



Net Income Attributable to Owners of Parent and ROE



Financial Conditions

(Millions of yen)

	2020.3	2021.3	2022.3	2023.3	2024.3
Total current assets	¥962,484	¥1,015,696	¥1,408,703	¥1,740,959	¥1,700,451
Net property, plant and equipment	175,580	196,967	223,078	259,088	337,366
Total investments and other assets	140,431	212,699	262,676	311,545	418,644
Total assets	1,278,495	1,425,364	1,894,457	2,311,594	2,456,462
Total current liabilities	382,578	327,661	468,578	629,893	611,899
Total liabilities	448,802	400,801	547,408	712,069	696,282
Total net assets	829,692	1,024,562	1,347,048	1,599,524	1,760,180

Cash Flows

(Millions of yen)

	2020.3	2021.3	2022.3	2023.3	2024.3
Cash flows from operating activities	¥253,117	¥145,888	¥283,387	¥426,270	¥434,720
Cash flows from investing activities	15,951	(18,274)	(55,632)	(41,756)	(125,148)
Cash flows from financing activities	(250,374)	(114,525)	(167,256)	(256,534)	(325,012)
Cash and cash equivalents at end of year	247,959	265,993	335,648	472,471	461,608

Management Discussion and Analysis of State of Operating Results

Regarding our operating results for fiscal 2024, consolidated net sales decreased 17.1% from the previous fiscal year to 1,830.5 billion yen, and operating income decreased 26.1% from the previous fiscal year to 456.2 billion yen. The decrease in both sales and income was mainly attributed to the fact that, with a surge in demand for end products such as PCs and smartphones in the pandemic, semiconductor manufacturers made active capital investments in semiconductor production equipment in a concentrated short period of time, which resulted in a slack in supply and demand, leading to adjustment of investments and production control taking place during the period from the latter half of fiscal 2023 through the first half of fiscal 2024. However, owning to accelerated capital investment by customers on the local Chinese market for improving their semiconductor self-sufficiency, in addition to successful progress on inventory adjustment by semiconductor manufacturers and advent of generative AI and other new applications, the semiconductor production equipment market bottomed out, and in the second half of fiscal 2024, it has started to recover.

The operating margin was 24.9%, a decrease of 3.1 points from the previous fiscal year. This was mainly due to a rise in R&D investment aimed at increasing our market share in the market recovery period from the next fiscal year onwards despite a decrease in net sales for the fiscal 2024. Total R&D expenses increased by 11.6 billion yen (year-on-year growth of 6.1%) from the previous fiscal year to a record-high of 202.8 billion yen to achieve the financial model targeted under the current Medium-term Management Plan as well as to achieve further growth in the future. Gross profit margin was 45.4%, a year-on-year increase of 0.8 points, owning to optimization of prices by introducing products with high added value, even with the soaring cost of components and raw materials due to inflation.

Net income attributable to owners of parent – which is operating income with non-operating income and expenses and extraordinary profit and loss reflected less tax expenses – was 363.9 billion yen, and its ratio against net sales was 19.9%, a decrease of 1.4 points from the previous fiscal year. Extraordinary or infrequent profit of 10.8 billion yen posted in fiscal 2024 was mainly from the sale of fixed assets (land and buildings) in Austin, Texas in the United States. As a result, net income per share was 783.75 yen.

With regard to objective indicators to assess the achievement status of management policy, management strategy and management goals, the Group uses net sales, operating margin and return on equity (ROE) as indicators for the financial model of the Medium-term Management Plan.

Management Discussion and Analysis of State of Financial Conditions and Cash Flows, and Information Related to Sources of Capital and Fluidity of Funds

Regarding our financial conditions, total assets stood at 2,456.4 billion yen at the end of fiscal 2024, an increase of 144.8 billion yen from the end of the previous fiscal year. This was mainly due to the increase in inventories, property, plant and equipment, and investment securities included in investments and other assets. Cash and cash equivalents at the end of fiscal 2024 decreased by 10.8 billion yen compared to the end of fiscal 2024, to 461.6 billion yen.

Current assets at the end of the current fiscal year were 1,700.4 billion yen, a decrease of 40.5 billion yen compared to the end of the previous fiscal year. This was mainly due to a decrease of 87.8 billion yen in prepaid consumption tax, a decrease of 73.4 billion yen in notes and accounts receivable - trade, and contract assets, and an increase of 110.7 billion yen in inventories. Inventories reached 762.9 billion yen, an increase of 110.7 billion yen from the end of the previous fiscal year, in consideration of market recovery, costs and supply chain sustainability in the following fiscal year(s) as well as a result of implementing measures such as leveling of procurement. Tangible fixed assets reached 337.3 billion yen, an increase of 78.2 billion yen from the end of the previous fiscal year. The increase mainly reflects the acquisition of equipment and metrology tools necessary for R&D of leading-edge technology and the establishment and renovation of various business sites to strengthen operations in Japan, Korea and Taiwan, as well as the completion of a new development building in Nirasaki City, Yamanashi Prefecture and new buildings now under construction including development buildings in Koshi City, Kumamoto Prefecture and Taiwa Town, Miyagi Prefecture and a logistics center in Oshu City, Iwate Prefecture. Investment securities increased 112.1 billion yen year-on-year to 277.7 billion yen due to the higher market prices of strategically-held listed shares. In addition, the turnover period for total assets* increased from 347 days in the previous fiscal year to 475 days.

Current liabilities decreased by 17.9 billion yen from the end of the previous fiscal year, to 611.8 billion yen. This was largely due to a decrease of 23.9 billion yen in trade notes and accounts payable resulting from a decreased volume of raw material purchases. Fixed liabilities increased by 2.2 billion yen from the end of the previous fiscal year, to 84.3 billion yen.

Net assets increased by 160.6 billion yen from the end of the previous fiscal year, to 1,760.1 billion yen. This was largely due to an increase of 363.9 billion yen resulting from recording net income attributable to owners of parent, an increase of 114.3 billion yen in accumulated other comprehensive income due to the increase in foreign currency translation adjustments resulting from exchange rate fluctuations as well as valuation of investment securities, a decrease resulting from the payment of 202.4 billion yen in year-end dividends for the previous fiscal year and interim dividends for fiscal 2024, and purchases of treasury stocks of 120.0 billion yen. As a result, the equity ratio was 71.1%.

Regarding cash flows, the balance of cash and cash equivalents including deposits and short-term investments with original maturities of more than three months was 472.5 billion, a decrease of 0.5 billion yen from the end of the previous fiscal year. As mentioned above, this was largely attributable to the payment of dividends based on our shareholder return policy of a 50% dividend payout ratio, the payment for purchases of treasury stocks as well as implementing procurement strategies and growth investments in anticipation of market recovery to occur in the following fiscal year(s), despite operating margin staying at a high level, 24.9%, and net income attributable to owners of parent reaching 363.9 billion yen.

Cash flows from operating activities were positive 434.7 billion yen, an increase of 8.4 billion yen compared to the end of the previous fiscal year. The major positive factors were 473.4 billion yen in income before income taxes, a 88.0 billion yen decrease in prepaid consumption tax, and a 84.8 billion yen decrease in trade accounts receivable, and contract assets. The major negative factors were 118.9 billion yen in payment of income taxes, and a 97.7 billion yen increase in inventories.

Cash flows from investing activities were negative 125.1 billion yen compared to negative 41.7 billion yen in the same period of the previous fiscal year. This was largely due to the payment of 116.9 billion yen for the purchase of property, plant and equipment.

Cash flows from financing activities were negative 325.0 billion yen compared to negative 256.5 billion yen in the same period of the previous fiscal year. This was largely due to the payment of 202.4 billion yen in dividends, and the payment of 120.0 billion yen for the purchase of treasury stock.

In fiscal 2024, together with the incorporation of strategic measures such as leveling of procurement, the level of inventories surpassed the record high of the previous fiscal year, and necessary working capital increased. Against this background, we continued growth investments, such as investment in R&D to create innovative technologies with high added value that meet growing technological demands and differentiate us from competitors, and collaboration with suppliers in consideration of production technology innovations and reduction of environmental impact. At the same time, we returned 322.4 billion yen to our shareholders through purchases of treasury stocks and payment of dividends based on our shareholder return policy of a 50% dividend payout ratio. These were all covered using cash on hand obtained through business operations. We will continue to maintain a solid financial foundation built up by a high profit margin, and at the same time, undertake growth investments for the future and proactive efforts to return profits to shareholders.

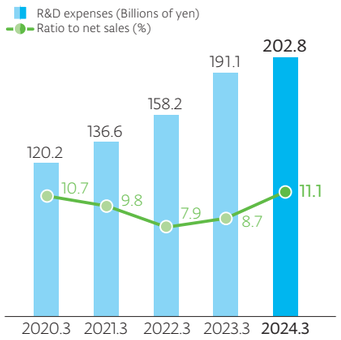
Return on equity (ROE), one of our management indicators, was 21.8%.

* Turnover period for total assets = Average total assets at the beginning and end of fiscal 2024 / Net sales for fiscal 2024 × 365

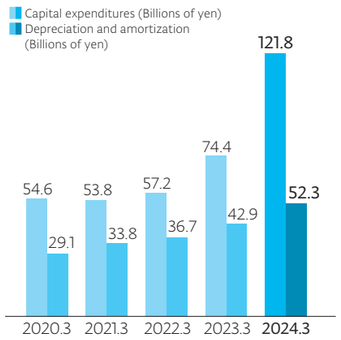
For the details of financial data, please refer to the "Consolidated Financial Statements" on the Company's website.
www.tel.com/ir/library/consolidated-financial-statements/

Selling, General and Administrative Expenses and Ratio to Net Sales

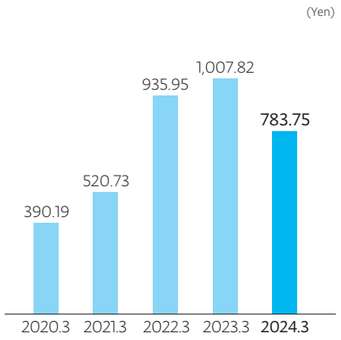
R&D Expenses and Ratio to Net Sales



Capital Expenditures and Depreciation and Amortization



Net Income per Share



Notes: The Company implemented a 3-for-1 common stock split on April 1, 2023. Net income per share is calculated on the assumption that stock split was implemented at the beginning of fiscal 2020.

Consolidated Eleven-year Summary

Tokyo Electron Limited and Subsidiaries
From fiscal 2014 to fiscal 2024

The amounts in this summary in millions and thousands of yen; thousands of U.S. dollars; and thousands of shares as of and for the years ended March 31, 2016 and prior are rounded to the nearest unit. Such amounts as of and for the years ended March 31, 2017 and onward are truncated at the nearest unit. Accordingly, totals for the years ended March 31, 2017 and onward do not necessarily agree with the sum of the corresponding individual amounts.

	(Thousands of U.S. dollars)												(Millions of yen)
	2024.3	2024.3	2023.3	2022.3[6]	2021.3	2020.3	2019.3[5]	2018.3	2017.3	2016.3	2015.3	2014.3
Net sales [1]	$12,089,870	¥1,830,527	¥2,209,025	¥2,003,805	¥1,399,102	¥1,127,286	¥1,278,240	¥1,130,728	¥799,719	¥663,949	¥613,125	¥612,170
Semiconductor production equipment	—	—	2,155,206	1,943,843	1,315,200	1,060,997	1,166,781	1,055,234	749,893	613,033	576,242	478,842
FPD production equipment	—	—	53,674	59,830	83,772	66,092	111,261	75,068	49,387	44,687	32,710	28,317
PV production equipment	—	—	—	—	—	—	—	—	—	—	3,618	3,806
Electronic components and computer networks	—	—	—	—	—	—	—	—	—	—	—	100,726
Other	—	—	144	131	129	197	197	425	438	6,229	555	479
Operating income	3,013,430	456,263	617,723	599,271	320,685	237,292	310,571	281,172	155,697	116,789	88,113	32,205
Income (loss) before income taxes	3,126,868	473,439	624,856	596,698	317,038	244,626	321,508	275,242	149,116	106,467	86,828	(11,756)
Net income (loss) attributable to owners of parent	2,403,828	363,963	471,584	437,076	242,941	185,206	248,228	204,371	115,208	77,892	71,888	(19,409)
Comprehensive income (loss)	3,158,846	478,281	501,421	486,183	305,801	187,084	242,696	206,152	119,998	60,984	80,295	(10,889)
Domestic sales	1,221,734	184,982	239,937	230,368	197,566	161,812	208,796	148,760	101,122	121,808	95,046	161,631
Overseas sales	10,868,136	1,645,544	1,969,088	1,773,437	1,201,535	965,474	1,069,443	981,967	698,597	542,141	518,079	450,539
Depreciation and amortization [2]	345,682	52,339	42,927	36,727	33,843	29,107	24,323	20,619	17,872	19,257	20,878	24,888
Capital expenditures [3]	804,709	121,841	74,432	57,288	53,868	54,666	49,754	45,603	20,697	13,341	13,184	12,799
R&D expenses	1,339,893	202,873	191,196	158,256	136,648	120,268	113,980	97,103	83,800	76,287	71,350	78,664
Total assets	16,223,915	2,456,462	2,311,594	1,894,457	1,425,364	1,278,495	1,257,627	1,202,796	957,447	793,368	876,154	828,592
Total net assets	11,625,259	1,760,180	1,599,524	1,347,048	1,024,562	829,692	888,117	771,509	645,999	564,239	641,163	590,614
Number of employees		17,702	17,204	15,634	14,479	13,837	12,742	11,946	11,241	10,629	10,844	12,304
	(U.S. dollars)											(Yen)
Net income (loss) per share of common stock:												
Basic [7]	$5.18	¥783.75	¥1,007.82	¥935.95	¥520.73	¥390.19	¥504.53	¥415.16	¥234.09	¥153.70	¥133.69	(¥36.10)
Diluted [4, 7]	5.16	781.20	1,003.86	931.30	517.76	388.01	502.41	413.74	233.45	153.33	133.38	—
Net assets per share of common stock [7]	24.92	3,773.11	3,389.68	2,857.48	2,170.73	1,755.99	1,790.59	1,558.16	1,306.50	1,142.79	1,189.08	1,075.31
Cash dividends per share of common stock [7]	2.60	393.00	1,711.00	1,403.00	781.00	588.00	758.00	624.00	352.00	237.00	143.00	50.00
Number of shares outstanding (thousands) [7]		471,632	157,210	157,210	157,210	157,210	165,210	165,210	165,210	165,211	180,611	180,611
Number of shareholders		48,167	51,723	34,258	29,547	30,348	50,843	35,186	21,937	24,664	20,829	30,563
												(%)
ROE		21.8	32.3	37.2	26.5	21.8	30.1	29.0	19.1	13.0	11.8	(3.3)
Operating margin		24.9	28.0	29.9	22.9	21.0	24.3	24.9	19.5	17.6	14.4	5.3
Equity ratio		71.1	68.7	70.5	71.1	64.1	70.0	63.8	67.2	70.9	73.0	69.8
Total asset turnover (times)		0.77	1.05	1.21	1.03	0.89	1.04	1.05	0.91	0.80	0.72	0.76
	(U.S. dollars)											(Thousands of yen)
Net sales per employee	$682,966	¥103,407	¥128,401	¥128,169	¥96,629	¥81,468	¥100,317	¥94,653	¥71,143	¥62,466	¥56,540	¥49,754

1 From fiscal 2015, Electronic components and computer networks were excluded because Tokyo Electron Device Limited, a former consolidated subsidiary, became an equity method affiliate. Photovoltaic panel (PV) production equipment has been included in Other from fiscal 2016. FPD production equipment has been included in Other from fiscal 2024.
2 Depreciation and amortization does not include amortization and loss on impairment of goodwill.
3 Capital expenditures only represent the gross increase in property, plant and equipment.
4 Dilution is not assumed for the year ended March 31, 2014.
5 From fiscal 2019, the Company applied "Partial Amendments to Accounting Standard for Tax Effect Accounting" (Statement No. 28, revised on February 16, 2018) released by the ASBJ.
6 From fiscal 2022, the Company applies "Accounting Standard for Revenue Recognition" (ASBJ Statement No. 29, March 31, 2020). Each number from the period ended March 31, 2022 includes the effects of the new standards.
7 The Company implemented a 3-for-1 common stock split on April 1, 2023. Net income (loss) per share of common stock - basic, net income per share of common stock - diluted and net assets per share of common stock are calculated on the assumption that stock split was implemented at the beginning of fiscal 2014. Dividends per share and the number of shares outstanding for the fiscal years ended March 31, 2014, through March 31, 2023, represent the amount of dividends and number of shares before the stock split.

Sustainability Data

Environment

Tokyo Electron Limited and Subsidiaries
From fiscal 2020 to fiscal 2024

* ● denotes data in the "Tokyo Electron Sustainability Data 2024" with third-party assurance.
www.tel.com/sustainability/data/index.html
* Totals may not match due to rounding.

Greenhouse Gas Emissions

		2020.3	2021.3	2022.3	2023.3	2024.3	
Scope 1 emissions	Scope 1 emissions (kt-CO_2)	28	29	16	22	21	
	Japan, energy-derived [1]	10	10	10	10	10	●
	Overseas, energy-derived [1]	2	2	2	2	2	
	Non-energy-derived greenhouse gas emissions total [2] (kt-CO_2e)	16	17	4	10	9	
	Non-energy-derived greenhouse gas emissions (kt-CO_2e) (Japan)	16	17	4	10	9	
	Japan – HFCs	0.2	0.1	0.7	3.4	2.3	
	Japan – PFCs	10.6	13.2	1.3	5.6	4.8	
	Japan – SF_6	5.0	3.1	1.4	1.2	1.1	
	Japan – Other	0.4	0.6	0.4	0.2	0.4	
	Non-energy-derived greenhouse gas emissions (kt-CO_2e) (Overseas)	—	—	0.1	0.0	0.0	
	Overseas – HFCs	—	—	0.0	0.0	0.0	
	Overseas – PFCs	—	—	0.0	0.0	0.0	
	Overseas – SF_6	—	—	0.0	0.0	0.0	
	Overseas – Other	—	—	0.1	0.0	0.0	
Scope 2 [3] emissions	Scope 2 emissions (Market standard) (kt-CO_2)	144	157	74	20	22	
	Japan	118	128	55	0	0 [4]	●
	Overseas	26	29	19	20	22	
	Scope 2 emissions (Location standard) (kt-CO_2)	156	169	168	180	192	
	Japan	129	138	136	144	155	
	Overseas	26	31	33	36	37	
Scope 3 [5] emissions	Scope 3 emissions (kt-CO_2)	7,910	9,386	13,238	14,335	11,829	
	Category 1 Purchased goods and services	1,796	2,395	3,332	4,053	3,239	
	Category 2 Capital goods	164	162	172	224	366	
	Category 3 Fuel- and energy-related activities	23	25	27	29 [6]	31	
	Category 4 Upstream transportation and distribution	9	9	15	19	12	
	Category 5 Waste generated in operations	2	2	3	3	3	
	Category 6 Business travel	2	1	4	14	27	
	Category 7 Employee commuting	12	11	12	14	15	
	Category 9 Downstream transportation and distribution	90	80	121	120	65	
	Category 11 Use of sold products	5,808	6,696	9,548 [6]	9,854	8,068	
	Category 12 End-of-life treatment of sold products	3	3	4	5	4	
Scope 1, 2 (Market standard) emissions total	Scope 1, 2 emissions (Market standard) (kt-CO_2)	171	186	90	42	43	
Scope 1, 2 (Market standard), 3 emissions total	Scope 1, 2, 3 emissions (Market standard) (kt-CO_2)	8,081	9,572	13,328	14,377	11,872	

1 Scope 1: Direct GHG emissions from use of fuel and gas we owned or controlled. Calculation method: Emissions = Σ (fuel consumed × CO_2 emission factor). Emission factor based on Japan's Act on Promotion of Global Warming Countermeasures.
2 Scope 1: Non-energy-derived CO_2 and greenhouse gases other than CO_2. Calculation method: Emissions = Σ (consumption × emission per unit consumption − amount recovered and properly treated) × global warming factor. Global warming factor is based on Japan's Act on Promotion of Global Warming Countermeasures. From fiscal year 2022, the value for the amount recovered and properly treated have been reviewed to match actual conditions.
3 Scope 2: Indirect GHG emissions from use of electricity we purchased Calculation method: Emissions = Σ (purchased electricity × CO_2 emission factor). Adjusted emission factors for the electrical power providers concerned based on Japan's Act on Promotion of Global Warming. Countermeasures were used as the emission factor for Japan.
Emission factors based on values from the Emissions Factors 2019 edition published by the International Energy Agency (IEA) were used as the emission factor for overseas electricity consumption.
4 Figure after Non-fossil Certificate Equivalent Amount Deduction. Scope 2 emissions prior to Non-fossil Certificate Equivalent Amount Deduction is 8 kt-CO_2; Non-fossil Certificate Equivalent Amount is 8 kt-CO_2.
5 Scope 3: Emissions from corporate value chains (excluding scope 1 and 2 emissions), such as product transportation, employee business travel and major outsourced production processes. The entire scope is divided into 15 categories, of which calculations were made for categories 1, 2, 3, 4, 5, 6, 7, 9, 11 and 12. Calculations for categories 8, 10, 13, 14 and 15 were not made as they are either not included in our activities or have already been included in other categories.
6 Revised figures

Water-Related Data

		2020.3	2021.3	2022.3	2023.3	2024.3	
Water	Water intake (thousand m^3)	1,305	1,397	1,417	1,495	1,542	
	Japan	1,098	1,183	1,204	1,255	1,293	●
	Groundwater	390	430	440	402	373	
	Tap water	411	450	479	520	569	
	Industrial water	297	303	285	333	350	
	Overseas	207	214	213	240	249	
	Water consumption (thousand m^3)	227	202	223	223	221	
	Japan	198	177	195	193	196	
	Overseas	29	25	28	30	24	
	Water discharge (thousand m^3)	1,078	1,195	1,194	1,272	1,321	
	Japan	900	1,006	1,009	1,062	1,096	
	Overseas	178	189	185	210	225	

Energy Consumption/Generation

		2020.3	2021.3	2022.3	2023.3	2024.3	
Energy	Consumption metric (sales) (kL/billion yen)	0.75	0.68	0.50	0.48	0.56	
	Consumption (crude oil equivalent) (kL) [1]	85,074	94,746	100,265	106,637	102,260	
	Japan [2]	70,642	78,126	82,703	87,137	82,999	●
	Overseas	14,432	16,620	17,562	19,499	19,261	
Electricity	Consumption (MWh)	320,193	357,744	380,127	404,964	435,514	
	Japan [3]	267,872	297,435	316,017	333,572	353,428	●
	Overseas	52,321	60,309	64,110	71,392	82,086	
Gas (city gas, LPG)	Consumption (crude oil equivalent) (kL) [1]	3,565	3,820	3,796	3,898	3,800	
	Japan	2,611	2,728	2,738	2,776	2,850	●
	Overseas	954	1,092	1,058	1,122	951	
Fuel (heavy oil A, diesel oil, kerosene, gasoline)	Consumption (crude oil equivalent) (kL) [1]	1,624	1,667	1,625	1,526	1,747	
	Japan	1,603	1,651	1,612	1,513	1,735	●
	Overseas	21	16	13	13	12	
Renewable energy (electricity)	Purchase (MWh)	3,334	4,980	227,523	365,876	393,383	
	Japan	0	0	197,137	330,791	353,428	
	Overseas	3,334	4,980	30,386	35,085	39,955	
PV power generation system	Power generation (MWh)	3,804	4,068	3,890	4,110	3,901	
	Japan	3,804	4,068	3,890	4,110	3,901	
	Overseas	0	0	0	0	0	
Amount of self-consumption through onsite solar power generation system	Amount of self-consumption (MWh)	2,579	2,783	2,695	2,780	2,837	
	Japan	2,579	2,783	2,695	2,780	2,837	
	Overseas	0	0	0	0	0	
Power sales	Power sales (MWh) [4]	1,225	1,285	1,195	1,330	1,063	
	Japan	1,225	1,285	1,195	1,330	1,063	
	Overseas	0	0	0	0	0	
Renewable energy (electricity) use rate	Electricity use rate (%)	2	2	60	91	90	
	Japan	1	1	63	100	100	
	Overseas	6	8	47	49	49	

1 Calculated using the conversion factors for fuel, gas and electricity in relation to the Act on Rationalizing Use of Energy and Shifting to Non-fossil Energy.
2 The revisions to the Act on Rationalizing Use of Energy and Shifting to Non-fossil Energy (came into force April 1, 2023) led to changes to the conversion coefficient from fiscal year 2024, so energy usage includes self-consumption through onsite solar power generation system.
3 For fiscal year 2024 and prior, electricity usage includes self-consumption through onsite solar power generation system.
4 Heat and steam not sold

Environmental Impact of Logistics

		2020.3	2021.3	2022.3	2023.3	2024.3
CO_2	Emissions (kt-CO_2)	99	89	136	139	76
	Japan	9	9	15	19	12
	Overseas	90	80	121	120	64
Proportion of marine transportation (international) (%)		31.9	34.3	33.2	39.0	42.1
Use of reinforced cardboard	Reduction in amount of wooden packaging materials used (t) Japan	—	—	—	2,000	1,915

Amount of Waste Generated

		2020.3	2021.3	2022.3	2023.3	2024.3
Waste	Amount generated (t)	13,989	14,997	14,459	18,249	19,714
	Japan	12,973	13,705	12,921	17,047	18,527
	Overseas	1,016	1,292	1,538	1,202	1,187
Recycling	Recycled amount (t)	13,748	14,814	14,189	17,978	19,480
	Japan	12,831	13,587	12,789	16,912	18,376
	Overseas	917	1,227	1,400	1,066	1,103
Incinerated and landfill disposal	Amount of waste (t)	241	183	270	271	234
	Japan	142	118	132	135	151
	Overseas	99	65	138	136	84
Dangerous/ Hazardous waste	Amount generated (t)	6,228	7,227	5,231	5,634	7,743
	Japan (Specially controlled industrial waste)	5,911	6,718	4,705	5,239	7,448 ●
	Overseas (Dangerous/Hazardous waste per country)	317	509	526	395	296
Dangerous/ Hazardous waste recycling	Recycled amount (t)	6,228	7,226	5,193	5,596	7,703
	Japan	5,911	6,718	4,705	5,239	7,448
	Overseas	317	508	488	357	256
Dangerous/ Hazardous waste incinerated/ landfill disposal	Amount of waste (t)	0	1	38	38	40
	Japan	0	0	0	0	0
	Overseas	0	1	38	38	40

Chemical Substances Consumption/Emissions (Japan)

		2020.3	2021.3	2022.3	2023.3	2024.3
PRTR Class I designated chemical substances[1]	Volume handled (t)	121	144	119	104	61
	Ferric chloride	98	106	85	76	—
	Hydrogen fluoride and its water-soluble salts	12	24	22	16	47
	Methylnaphthalene	10	13	11	10	11
	Tetramethylammonium hydroxide	—	—	—	—	2
	VOCs[2]	0.1	0.1	0.1	0.1	0.2
	Other	1	1	1	1	1
	Amount transported (waste amount) (t)	111	131	108	94	48
	Amount transported (sewerage) (t)	0	0	0	0	2
	Consumption (t)	10	13	11	10	11
NOx	Emissions (t)	11.9	13.0	13.1	12.7	12.9
SOx	Emissions (t)	4.0	4.9	4.8	4.5	4.6

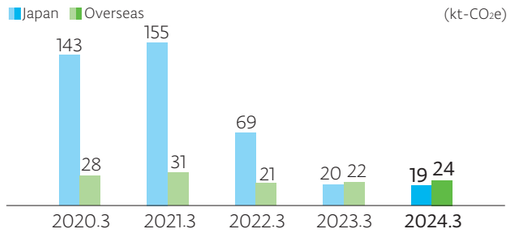
1 Some substances have been added and others eliminated from the scope in accordance with the revision to target substances for the fiscal year ended March 2024.
2 VOCs: Volatile Organic Compounds

Other

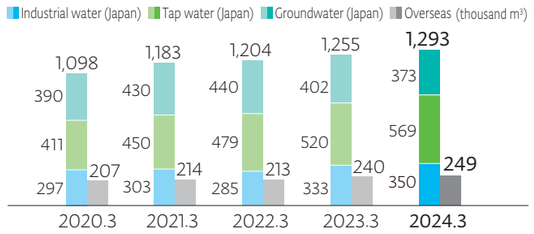
		2020.3	2021.3	2022.3	2023.3	2024.3
ISO 14001	Number of certified offices	9	11	11	11	11
	Japan	5	5	5	5	5
	Overseas	4	6	6	6	6
Environmental investments	Environmental investment effects (millions of yen)	82	32	30	31	16
	Environmental investment effects (t-CO_2)	1,043	455	973	799	334
Biodiversity	Number of ecosystem tours*	18	18	16	22	20
	Number of ecosystem tour participants*	368	52	87	138	289
Environmental laws and regulations	Number of breaches of environmental laws and regulations	0	0	0	0	0
	Amount of fines for breaches of laws and regulations	0	0	0	0	0
Total product shipment (t)*		31,184	28,862	41,352	48,922	35,769
Copier paper*	Use (t) (Japan)	132	38	32	138	88

* Scope: Japan

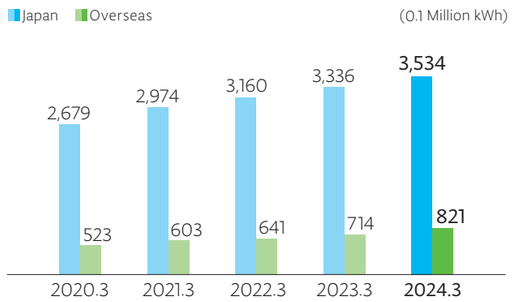
Scope 1 Emissions and Scope 2 Emissions (Market standard)



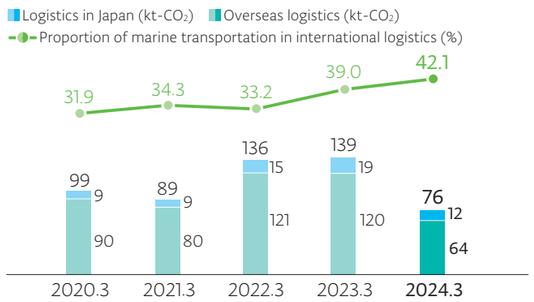
Water Consumption



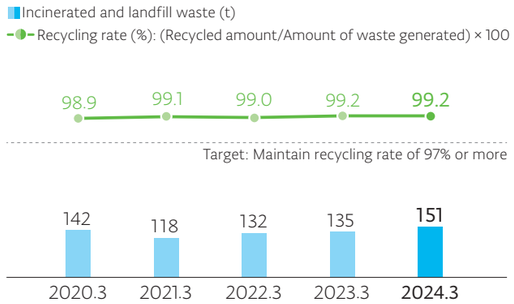
Electricity Consumption



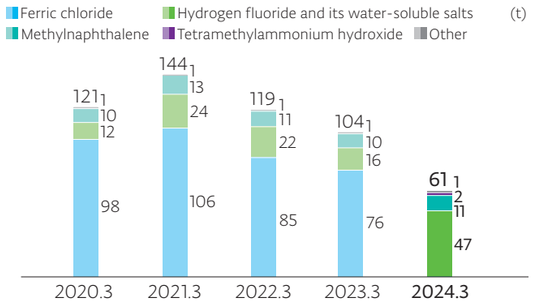
CO_2 Emissions from Logistics and the Proportion of Marine Transportation



Recycling Rate/Generation of Incinerated and Landfill Waste in Japan



Volume of PRTR Class I Designated Chemical Substances Handled in Japan



Social

Tokyo Electron Limited and Subsidiaries
From fiscal 2020 to fiscal 2024

* ● denotes data in the "Tokyo Electron Sustainability Data 2024" with third-party assurance.
www.tel.com/sustainability/data/index.html

Composition of Employees (Entire Group)

		2020.3	2021.3	2022.3	2023.3	2024.3
Regular employees (Region)	Number of regular employees	13,542	14,022	15,140	16,605	17,071
	Japan	7,806	7,921	8,234	8,796	9,150
	Rest of Asia	3,494	3,796	4,328	4,819	4,854
	Europe and Middle East	528	509	578	669	708
	North America	1,714	1,796	2,000	2,321	2,359

Composition of Employees (Japan)

		2020.3	2021.3	2022.3	2023.3	2024.3
Employees (Employment type)	Number of employees	8,100	8,296	8,661	9,325	9,746
	Regular employees	7,806	7,921	8,234	8,796	9,150
	Men	6,681	6,722	6,944	7,429	7,716
	Women	1,125	1,199	1,290	1,367	1,434
	Non-regular employees	294	375	427	529	596
	Men	263	348	403	490	553
	Women	31	27	24	39	43

Recruitment/Employment (Japan)

		2020.3	2021.3	2022.3	2023.3	2024.3
New graduates hired	Number hired	281	253	209	231	353
	Under 30 yrs. old	280	252	208	231	351
	Men	233	207	177	193	304
	Women	47	45	31	38	47
	30–49 yrs. old	1	1	1	0	2
	Men	1	1	0	0	2
	Women	0	0	1	0	0
	50 yrs. old and over	0	0	0	0	0
	Men	0	0	0	0	0
	Women	0	0	0	0	0
	Percentage of women	16.7	17.8	15.3	16.5	13.3
Career-track recruits	Number hired	150	191	400	580	271
	Under 30 yrs. old	42	56	131	209	89
	Men	35	49	96	185	72
	Women	7	7	35	24	17
	30–49 yrs. old	96	123	250	355	172
	Men	82	92	202	306	141
	Women	14	31	48	49	31
	50 yrs. old and over	12	12	19	16	10
	Men	10	11	17	13	8
	Women	2	1	2	3	2
	Percentage of women	15.3	20.4	21.3	13.1	18.5
Employees with disabilities	Percentage hired (TEL)	2.06	2.43	2.32	2.03	2.18
	Percentage hired (Group in Japan)	2.01	2.30	2.37	2.27	2.34
Reemployment system	Number of users	242	313	389	475	545
	Men	235	305	376	451	510
	Women	7	8	13	24	35
Percentage of regular employees who received regular performance and career evaluations		100.0	100.0	100.0	100.0	100.0

Female managers (Entire Group)

		2020.3	2021.3	2022.3	2023.3	2024.3
Female Managers[1, 2]	Number of people	—	—	163	182	221
	Percentage	—	—	5.5	5.7	6.3
	Number of people (senior directors and above[3])	—	—	10	16	20
	Percentage (senior directors and above[3])	—	—	2.2	3.3	3.7

1 Percentage of female managers, calculation method: (Number of female managers/Number of managers) × 100 (The number of managers includes experts (from fiscal 2022) and employees reemployed after retirement (from fiscal 2024).) 2 As of March 31 3 Employees of a certain level or position based on the global human resources system.

Female managers (Japan)

		2020.3	2021.3	2022.3	2023.3	2024.3
Female managers[1, 2]	Number of people	23	26	46	51	67
	Percentage	2.0	2.2	2.6	2.7	3.1

1 Percentage of female managers, calculation method: (Number of female managers/Number of managers) × 100 (The number of managers includes experts (from fiscal 2022) and employees reemployed after retirement (from fiscal 2024).) 2 As of March 31

Employee retention (Japan)

		2020.3	2021.3	2022.3	2023.3	2024.3
Employee retention	Retention after three years of joining TEL*	93.8	94.1	94.7	92.7	93.1
	Men	94.6	94.8	95.0	93.2	93.6
	Women	88.6	89.3	93.5	90.6	90.9
	Average service years	17 yrs. 2 mos.	17 yrs. 4 mos.	17 yrs. 2 mos.	16 yrs. 8 mos.	16 yrs. 6 mos.
	Men	17 yrs. 5 mos.	17 yrs. 7 mos.	17 yrs. 6 mos.	16 yrs. 10 mos.	16 yrs. 8 mos.
	Women	15 yrs. 11 mos.	15 yrs. 10 mos.	15 yrs. 8 mos.	15 yrs. 7 mos.	15 yrs. 7 mos.

* Average in recent five years

Employee turnover (Entire Group)

		2020.3	2021.3	2022.3	2023.3	2024.3
Turnover*	Employee turnover	—	—	589	599	415
	Men	—	—	507	509	351
	Women	—	—	82	90	64
	Turnover percentage	—	—	4.2	3.9	2.5

* Turnover due to personal circumstances.

Employee turnover (Japan)

		2020.3	2021.3	2022.3	2023.3	2024.3
Turnover*	Employee turnover	82	87	87	98	113
	Men	54	75	69	81	93
	Women	28	12	18	17	20
	Turnover percentage	1.0	1.0	1.0	1.1	1.2

* Turnover due to personal circumstances.

Work-life Balance (Japan)

		2020.3	2021.3	2022.3	2023.3	2024.3
Annual paid leave	Take-up rate[1]	72.6	62.5	64.6	70.0	80.6
Refreshment leave	Number of those who took leave	901	688	512	1,731	630
	Men	773	610	435	1,485	547
	Women	128	78	77	246	83
Paternity leave	Number of those who took leave	184	148	137	149	169
Childcare leave	Number of those who took leave	46	41	70	96	153
	Men	12	16	36	57	122
	Women (percentage who took leave)	34 (97.1)	25 (92.6)	34 (97.1)	39 (97.5)	31 (100)
	Number of those who returned to work after leave	48	54	60	76	155
	Men	8	15	32	43	120
	Women	40	39	28	33	35
	Percentage reinstated	94.1	96.4	95.2	98.7	100.0
	Retention rate	93.3	95.0	90.0	97.9	91.2
Shorter working hour system	Number of those who used	149	132	110	105	103
	Men	11	9	7	10	10
	Women	138	123	103	95	93
Leave to care for sick / injured child	Number of those who took leave	625	510	547	599	661
	Men	428	353	373	424	513
	Women	197	157	174	175	148
Childcare support leave	Number of those who took leave	125	86	80	98	113
	Men	26	29	23	33	45
	Women	99	57	57	65	68
Extended nursing care leave	Number of those who took leave	2	2	1	4	6
	Men	2	0	0	4	5
	Women	0	2	1	0	1
Short nursing care leave	Number of those who took leave	95	110	87	85	100
	Men	56	69	57	53	54
	Women	39	41	30	32	46
Shorter working hour system for nursing care	Number of those who used	2	0	4	0	1
	Men	1	0	2	0	1
	Women	1	0	2	0	0
Spousal transfer leave system	Number of those who used	—	—	—	—	3

1 Take-up rate of annual paid leave calculation method: (Days of paid leave taken by employees[2]) / (Days of paid leave provided to employees[2]) × 100 2 Incl. non-regular employees

Products/Innovation

		2020.3	2021.3	2022.3	2023.3	2024.3
Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services		0	0	0	0	0
Active issued patents (Region/Country)[1]	Number of active issued patents	18,137	18,692	19,572	21,645	23,249
	Japan	5,348	5,484	5,703	6,307	6,715
	U.S.	4,606	4,822	4,988	5,360	5,603
	Europe	191	206	167	—[2]	—[2]
	Korea	3,223	3,363	3,731	4,683	5,111
	Taiwan	2,948	2,925	3,014	3,120	3,326
	China	1,821	1,892	1,969	2,175	2,494

1 Figures for fiscal 2020 to fiscal 2022 are based on our database; figures for fiscal 2023 are based on LexisNexis® PatentSight® database. 2 Europe is not included in the scope.

	2018.12	2019.12	2020.12	2021.12	2022.12
Global patent application rate[1]	79.8	74.3	74.6	80.1 [2]	79.9 [2]

1 Percentage applied for in countries other than Japan of the number of inventions leading to patents in each calendar year.
2 Added international applications filed under the Patent Cooperation Treaty (PCT) to applications filed in other countries.

		2019.12	2020.12	2021.12	2022.12	2023.12
Patent application success rate*	Japan	83.1	84.9	79.8	74.5	81.8
	U.S.	85.5	87.3	83.9	81.5	80.7

* Percentage of patent applications that have been allowed among those that have completed examination each calendar year.

Customer

	2020.3	2021.3	2022.3	2023.3	2024.3
Percentage of respondents who selected "Very Satisfied" or "Satisfied" in the customer satisfaction survey	93.3	96.7	100.0	100.0	100.0

Safety

	2020.3	2021.3	2022.3	2023.3	2024.3
Percentage of employees who received training on basic safety	100	100	100	100	100
Percentage of employees who received training on advanced safety	100	100	100	100	100
Lost time incident rate (LTIR)	0.51	0.63	0.66	0.83	0.31
Number of workplace injuries per 200,000 work hours (TCIR)	0.23	0.27	0.30	0.33	0.15

Procurement

	2020.3	2021.3	2022.3	2023.3	2024.3
Percentage of new important suppliers screened using social criteria	100	100	100	100	100
Rate of improvement after supply chain sustainability assessment	35.8	23.1	31.5	30.5	29.2
Rate of improvement after supply chain BCP assessment	16.0	20.3	24.4	22.2	20.4
Number of identified RMAP conformant smelters (rate of identification)	261 (100)	236 (100)	243 (100)	234 (100)	238 (100)

Governance

	2020.3	2021.3	2022.3	2023.3	2024.3
Total number of critical incidents notified to the Board of Directors	0	0	0	0	0
Total number of incidents subject to legal action on the basis of anti-competitive conduct, anti-trust activity or monopolistic practices where the governance body's involvement was revealed	0	0	0	0	0
Number of executive officers who received training on anti-corruption [1]	0	15	20	28	0
Total number (percentage) of directors who provided instructions on the body's policies and procedures in relation to anti-corruption [1]	11 (100)	11 (100)	12 (100)	6 (100)	6 (100)
Total number (percentage) of directors who received training on anti-corruption [1]	11 (100)	0 (0)	0 (0)	3 (50)	0 (0)
Payment to industry groups, etc. (thousand yen) [2]	29,927	32,036	56,374	73,313	82,263
Payment to politically affiliated organizations (yen)	0	0	0	0	0
Average tenure of directors	4.84	6.09	6.58	5.16	6.16
Average rate of attendance for Board meetings	99.39	98.96	99.50	98.62	99.09

1 Scope: Japan 2 Industry groups were reviewed from fiscal year 2022.

Compliance

	2020.3	2021.3	2022.3	2023.3	2024.3
Education on TEL's Code of Ethics/pledge rate [1]	—	98.8	91.6	96.1	94.9 [2]
Percentage of employees who have consented to the information security agreement	100.0	99.4	99.9	100.0	99.3
Significant fines and non-monetary sanctions for non-compliance with laws and regulations in the social and economic area	0	0	0	0	0
Number of cases that lead to disciplinary action due to compliance infractions [1, 3]	—	—	—	—	59
Bribery/Corruption	—	—	—	—	0
Competition Act/Anti-Monopoly Act	—	—	—	—	0
Money laundering/Insider trading	—	—	—	—	0
Information security/Intellectual property/Personal information	—	—	—	—	3
Conflicts of interest	—	—	—	—	0
Harassment	—	—	—	—	22
Other (Violations of service obligations)	—	—	—	—	34

1 Scope: Entire Group 2 Period is from March to May 2024. 3 Includes violations of the Tokyo Electron Group Code of Ethics, company regulations, etc.

Social Contribution

		2020.3	2021.3	2022.3	2023.3	2024.3
Spending on social contribution (million yen)*		250	244	170	301	533
Cash donations breakdown	Charity donations (providing donations/relief supplies to charity organizations)	4	13	15	9	7
	Community investment (charitable expenses for long-term cause for community)	68	62	75	40	76
	Commercial initiatives (charitable expenses with anticipated effects on business growth)	28	25	10	51	17

* Spending on social contribution activities excluding disaster relief contributions.

Stock Information (As of March 31, 2024)

Corporate Name and Head Office
Tokyo Electron Limited
Akasaka Biz Tower
3-1 Akasaka 5-chome, Minato-ku,
Tokyo 107-6325, Japan

Established
November 11, 1963

Annual General Shareholders' Meeting
June

Common Stock

Stock trading unit	100 shares
Authorized	900,000,000 shares
Issued	471,632,733 shares
Number of shareholders	48,167

Common Stock Listed on
Tokyo Stock Exchange Prime Market
(Stock code: 8035)

Independent Auditor
KPMG AZSA LLC

Administrator of Shareholders' Register
Sumitomo Mitsui Trust Bank, Limited
4-1 Marunouchi 1-chome, Chiyoda-ku, Tokyo, Japan

Direct mail and inquiries to:
Sumitomo Mitsui Trust Bank, Limited
8-4 Izumi 2-chome, Suginami-ku,
Tokyo, 168-0063, Japan
Tel (toll free): 0120-782-031
(available only in Japan)

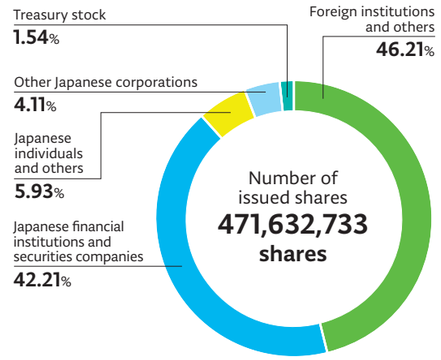
Website
www.tel.com

Major Shareholders

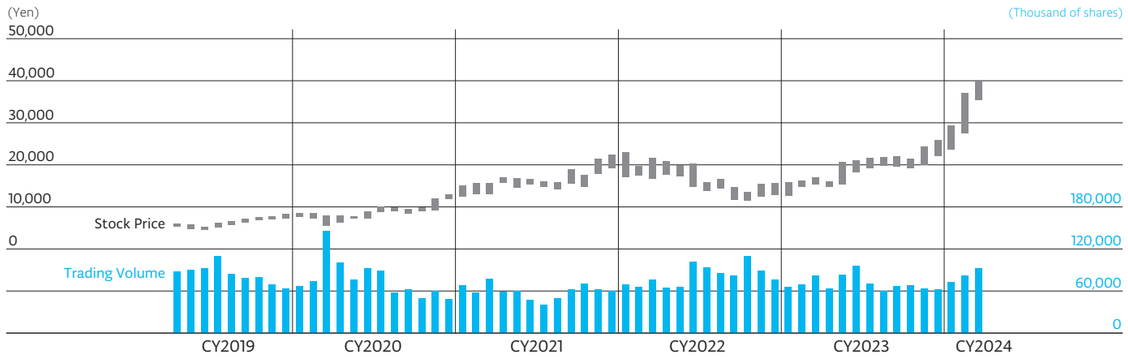
Shareholders	Number of shares held (thousand)	Voting share ratio (%)
The Master Trust Bank of Japan, Ltd.(trust account)	117,029	25.20
Custody Bank of Japan, Ltd.(trust account)	48,367	10.41
JP MORGAN CHASE BANK 385632	15,743	3.39
TBS HOLDINGS, INC.	15,112	3.25
STATE STREET BANK WEST CLIENT – TREATY 505234	9,778	2.10
SSBTC CLIENT OMNIBUS ACCOUNT	8,374	1.80
HSBC HONG KONG-TREASURY SERVICES A/C ASIAN EQUITIES DERIVATIVES	7,291	1.57
GOVERNMENT OF NORWAY	7,288	1.56
JP MORGAN CHASE BANK 385781	6,196	1.33
JPMorgan Securities Japan Co., Ltd.	4,706	1.01

Note: Shares of less than one thousand have been rounded down in the "Number of shares held."

Distribution of Ownership among Shareholders



Stock Price and Trading Volume



	2020.3	2021.3	2022.3	2023.3	2024.3
High (yen)	8,625	15,773	23,057	20,943	40,160
Low (yen)	4,587	6,308	14,223	11,517	14,810
Total shareholder return (%) (TOPIX, dividends reinvested)	130.9 (90.5)	301.0 (128.6)	412.6 (131.2)	328.8 (138.8)	777.3 (196.2)

Note: The Company implemented a 3-for-1 common stock split on April 1, 2023. Stock price is calculated on the assumption that stock split was implemented at the beginning of fiscal 2020.