

Establishing a sustainable management foundation



Medium-term goal

Build a management foundation for increasing value

Priority themes



Corporate governance



Safety management



Environmental management



Supply chain management

Relevant SDGs



8 Decent work and economic growth



13 Climate action



16 Peace, justice and strong institutions

Corporate governance

Governance framework

[URL www.tel.com/ir/policy/cg/index.htm](http://www.tel.com/ir/policy/cg/index.htm)

TEL has a medium-term vision of becoming “a truly global company generating high-added-value and profits through innovative technologies and groundbreaking solutions with diverse integrated technologies.” We believe it is important to build a governance framework that supports our medium-term vision.

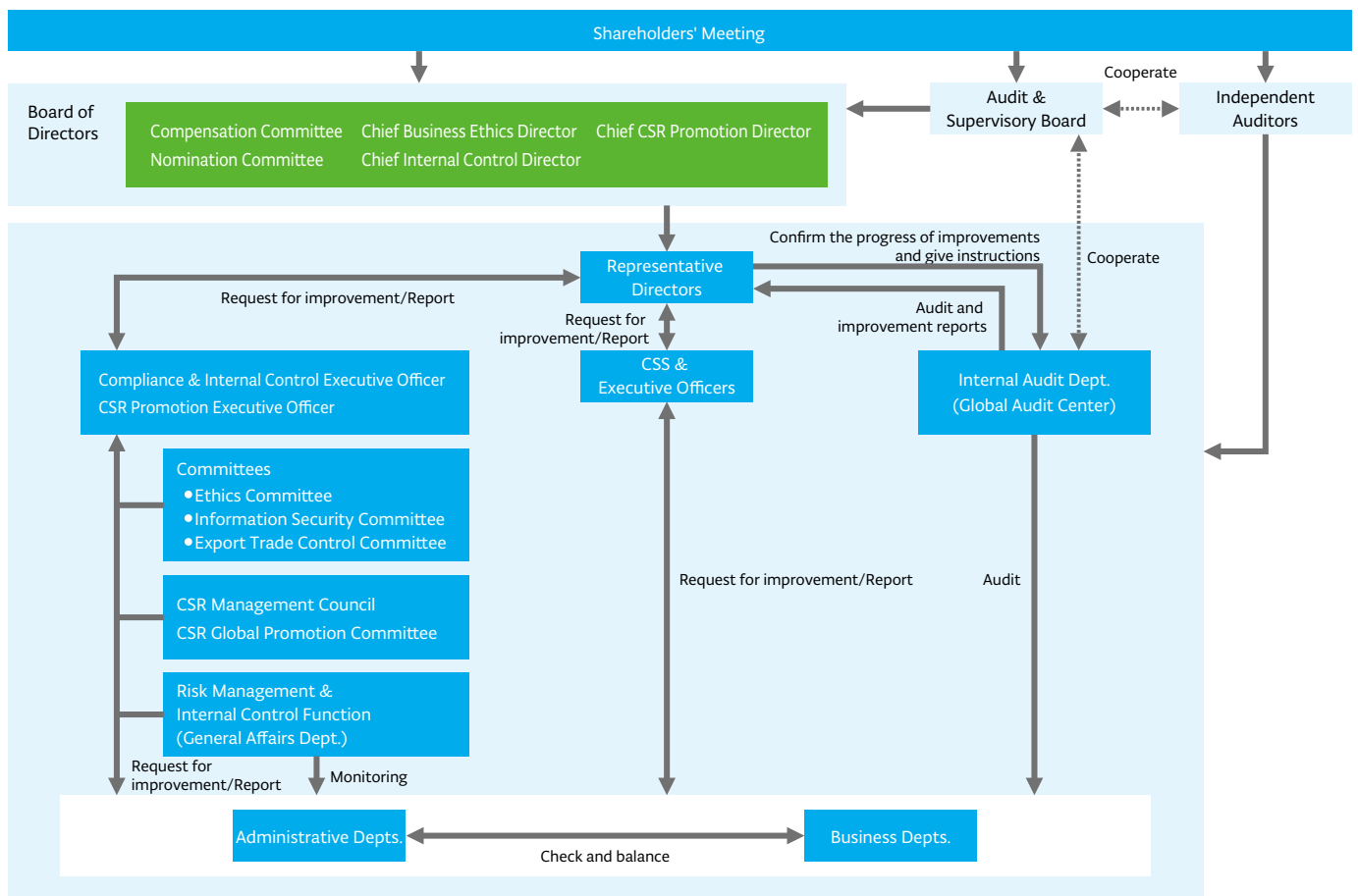
Our governance structure consists of a Board of Directors and an Audit & Supervisory Board. Effective governance is achieved through the supervision of management by the Audit & Supervisory Board. Based on this organization structure, we have also established systems that will facilitate growth-oriented governance directed at sustainable growth, including the following.

- The Board of Directors: to make major operational decisions and play a supervisory role in the execution of those decisions
- The Nomination Committee and Compensation Committee: to ensure fair, effective, and transparent management
- Corporate Senior Staff (CSS): to formulate and advance company strategy

Directors work to achieve sustainable growth and increase corporate value over the medium to long term based on their fiduciary responsibility to shareholders. The current Board of Directors meetings achieve an appropriate sense of productive tension and constructive debate due to the combined presence of executive directors, essential for making operational decisions, and outside members, who provide objectivity.

The Audit & Supervisory Board is part of a structure that enables its board members to obtain sufficient information necessary for audits by collecting information through on-site surveys conducted by full-time Audit & Supervisory Board members, and by maintaining appropriate coordination with the Internal Audit Department and independent auditors. In addition, the composition of Audit & Supervisory Board members provides a good balance of knowledge required for operational audits and accounting audits, and we believe these board members are able to perform the company’s auditing functions effectively.

Corporate governance framework, internal control system and risk management system



Evaluating the effectiveness of the Board of Directors [URL www.tel.com/news/2017/0512_004.htm](http://www.tel.com/news/2017/0512_004.htm)

TEL discusses and evaluates the effectiveness of the Board of Directors every year in accordance with the TEL Corporate Governance Guidelines. Following is a summary of the evaluation conducted on the effectiveness of the Board of Directors for the period June 2016–April 2017.

1. Method of evaluation

A survey on the effectiveness of the Board of Directors, the Nomination Committee, and the Compensation Committee was given to all directors and Audit & Supervisory Board members. Opinions on the effectiveness were exchanged and discussed among mainly outside directors and outside Audit & Supervisory Board members before being shared with the entire Board of Directors where the effectiveness was evaluated.

2. Results of analysis and evaluation

At Board of Director meetings, the CEO and executive directors present periodic reports. In addition, discussion topics are set on any issues concerning the Board of Directors. These topics are keenly debated by directors and Audit & Supervisory Board members based on their diverse insight and experience. Draft proposals presented by executive management are fully discussed by the Board of Directors after receiving feedback from outside directors and outside Audit & Supervisory Board members. As a result, some proposals are passed as draft amendments and are subject to a free and open-minded exchange of views and substantive discussion.

Based on recognition of this situation, we believe that our Board of Directors is functioning effectively and fulfilling its role as stipulated in the TEL Corporate Governance Guidelines.

3. Challenges and policies going forward

We will increase the amount of quality time spent discussing our Group's direction and strategies, including any important management issues, as well as our medium- to long-term management and growth strategies. Based on this year's evaluation of effectiveness, we will also strive to further improve the effectiveness of the Board of Directors, including enhancing opportunities for outside directors and outside Audit & Supervisory Board members to exchange their views. In addition, the Board of Directors will continue to discuss and review its composition and operation based on diversity.

Business ethics and compliance

Compliance system

TEL has formulated the Code of Ethics of the Tokyo Electron Group as a set of uniform standards to govern all of its global business activities. As well as appointing a Chief Business Ethics Director, we have established the Ethics Committee comprised of the Chief Business Ethics Director, the Ethics Committee Chairman, and presidents of major Group companies in and outside Japan, and are making every effort to promote business ethics awareness throughout the Group.

In addition, we have appointed a Compliance & Internal Control Executive Officer from among our executive officers to raise awareness of compliance across the Group and further improve Group-wide compliance. Each Group company has also drawn up its own compliance regulations, setting out basic compliance-related requirements in line with the Code of Ethics. The compliance regulations are intended to ensure that all individuals who take part in the business activities of the Group clearly understand the pertinent laws and regulations, international standards and internal company rules, and consistently apply these rules in all of their activities.

Compliance education

Through the TEL Group's e-learning system, we provide the web-based training programs covering the basics of compliance, export-related compliance, protection of personal information, the Act for Subcontracting and other topics. All executives and employees are required to complete these programs. In addition, other web-based programs tailored to specific positions and job roles are available, including those on insider trading and the Social Security and Tax Number System.

We also have a quiz-based business ethics and compliance education course, launched in fiscal 2014, for all Group executives and employees. Updated yearly, the quiz is intended to maintain compliance awareness throughout the Group and disseminate the latest information.

In addition to these web-based courses, we organized in-house seminars in fiscal 2017 for Corporate Directors and executive officers on the subjects of compliance and internal control.

Internal reporting system

The TEL Group has an internal reporting system that employees can use to report any activity suspected of being in breach of laws, regulations or business ethics. An ethics hotline and a compliance hotline have been established to receive reports from all Group companies, and each overseas location also has its own reporting system. In all instances, the system ensures that whistleblowers remain anonymous and are protected from any disadvantage or repercussions. There were no reports or cases of non-compliance with laws, regulations, or the Code of Ethics in fiscal 2017 that could have had a material impact on the Group's business or local communities.

Internal control system and risk management

Risk management system

To more effectively strengthen the internal control and risk management systems of the entire Group, TEL has established a dedicated risk management and internal control function within the General Affairs Department of the corporate headquarters. This function analyzes the risks faced by the Group and identifies material risks. It then monitors the management of such risks while supporting and implementing risk management activities. The function also regularly reports the status of risk management activities to the Audit & Supervisory Board Members and the Board of Directors. In fiscal 2017, the Group reassessed the material risks in its operating environment. For each risk determined to be material, the status of risk management at the responsible divisions was reconfirmed. Going forward, we will continue these initiatives to enhance the efficacy of our risk management framework.

Auditing by the internal audit department

The Global Audit Center of the corporate headquarters is the TEL Group's internal audit department. This Center is responsible for auditing business activities, compliance and systems at domestic and overseas Group companies and business units (BUs) in accordance with each fiscal year's auditing plan. The Center also annually evaluates the effectiveness of the Group's internal control over financial reporting based on the Financial Instruments and Exchange Act of Japan. At operating divisions where issues have been identified through audits and assessments, the Center monitors progress and provides necessary guidance for improvement.

Information security management

To ensure appropriate management of information assets, TEL has an information management framework centered on its Information Security Committee, which is composed of representatives from departments within the Group.

Based on the policy of the Information Security Committee, rules of the protection and control of confidential information and personal information are regulated. Employees and executives understand the regulations through an e-learning system.

Additionally, we have a reporting system for both actual and potential cases (incidents) of information leakage. Reported cases are quickly settled and analyzed. In accordance with the analysis, reoccurrence prevention measures are implemented throughout the Group.

In order to mitigate emerging cyber security threats, we examine and undertake rational countermeasures as necessary. We also have in place systems to detect targeted threats that utilize social engineering as well as a supervisory framework to prevent damage.



Business Continuity Plans (BCPs)

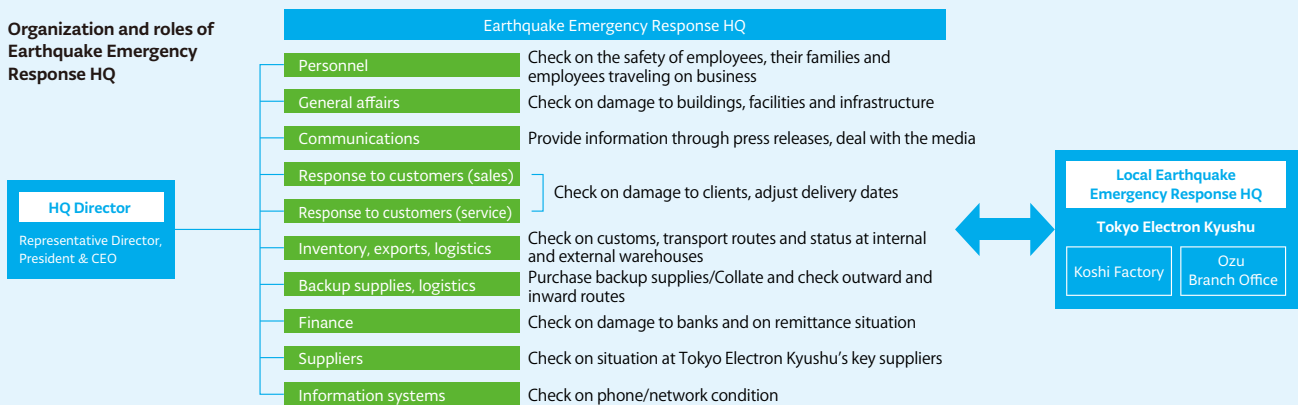
The TEL Group began building business continuity plans in 2003. After the Great East Japan Earthquake, we rebuilt these plans to be more effective and include provisions for restoring operations after crises, focusing on major business sites. Specific initiatives include preparations for disasters such as stockpiling emergency supplies (including food and drinking water), reinforcing essential infrastructure, rebuilding the safety confirmation system, creating manuals, and implementing drills and employee training. Furthermore, to meet our responsibilities as an equipment manufacturer, we pursue ongoing efforts to improve our BCPs, including taking steps to facilitate early recovery and alternate production.

Feature | Response to the Kumamoto Earthquake

When the Kumamoto Earthquake struck in April 2016, the Group was able to respond with speed and precision based on the BCP it had prepared. Our safety confirmation system was activated at the time of the foreshock at 9:26 p.m. on April 14, and Earthquake Emergency Response HQ was established at our Akasaka Headquarters at 9:50 p.m. Furthermore, in coordination with Tokyo Electron Kyushu, which has business in the affected area, we made efforts to provide support to the earthquake victims and facilitate early recovery of business activities. By May 10, we had held 17 meetings to discuss measures for dealing with the disaster. In addition to working to restore our own affected buildings and facilities, we also provided support to our customers and suppliers in the affected areas. As a result of these activities, we were able to continue business without notable problems.

Currently, we are making further improvements to our BCPs by reviewing our response to the Kumamoto Earthquake and recognizing new problems, such as unanticipated damage to equipment.

Organization and roles of Earthquake Emergency Response HQ



Safety management

Safety management framework

To ensure the safety of its employees, customers, and all others involved in its business operations, TEL places a strong focus on preventing work-related accidents.

At each factory and office, monthly safety and health committee meetings are held to discuss safety monitoring and to manage any workplace safety or employee health issues. In addition, representatives from appropriate departments monitor safety performance at least once per month at each manufacturing site as part of an overall systematic effort to solve problems.

We use a management system based on OHSMS¹ to identify and analyze potential workplace hazards. The knowledge obtained from this system is shared throughout the company. Before starting work, all employees discuss the risks involved and the required actions to prevent mistakes. The group leader oversees the work at all times to eliminate any unsafe conditions or behavior that could lead to accidents. In addition, whenever employees become aware of a lack of preparation or an unexpected event during a task, they are encouraged to stop work and take any necessary corrective action. Safety managers also regularly give advice on how to manage hazards, further raising worker safety awareness.

¹ Occupational Health and Safety Management System (OHSMS): A management system to reduce the potential risk of work-related accidents and improve the overall level of safety and occupational health. Based on the policy set by senior management, a series of Plan, Do, Check, Act processes for safety and occupational health management are drawn up and implemented on the employees' own initiative.

Safety education

TEL promotes the creation of safe workplaces by implementing two education programs globally. Our program on basic safety targets all employees and is provided as introductory training for new hires as well as refresher training every third year of employment. In total, more than 40,000 employees have completed this program. Our other program, advanced safety, targets employees working in clean rooms and on production lines, and must be completed every year. To eliminate accidents, we also provide risk assessment training and 13 additional web-based training courses² at offices and factories in Japan and overseas. Risk assessment training has been statistically shown to help eliminate accidents. Finally, we also provide safety information to suppliers as part of our support for initiatives to prevent accidents.

² 13 web-based training courses: preventing equipment confusion; preventing falls from openings; stop work authority (SWA); preventing being caught in a drive unit; preventing work-related back pain; pointing and calling; preventing exposure to liquid chemicals; work safety rules; detailed work safety instructions; rules for accident reporting; assessing risks; measures against ergonomic incidents; and criteria for SWA

Initiatives for safety

TEL is committed to improving buildings and facilities to increase workplace safety. In 2016, we upgraded emergency exits at four key factories in Japan. The aim of the upgrades was to make plants even safer by making evacuations easier. This included designing aisles and passageways so that people can always tell where exits are and building doors so that they can be easily opened even by persons with limited manual dexterity.

We maintain a high priority on creating safe workplaces, including programs such as promoting safety management and safety education. Accident-related indices have been maintained at or below target, with a total case incident rate³ of 0.28 in fiscal 2017.

³ Total case incident rate (TCIR): the number of workplace accidents per 200,000 work hours



Environmental management

Environmental management system

TEL has operated environmental management systems based on ISO 14001 since 1997, especially at its manufacturing subsidiaries. In 2016, we acquired multi-site ISO 14001 certification for our factories and offices in Japan that had previously acquired certification separately. Also, along with adhering to the 2015 revisions, we identified overall internal and external issues and stakeholder needs and expectations in relation to the environment. We set the following as our risks and opportunities to address: (1) environmental management by reducing the environmental impact of our business activities, (2) compliance with applicable laws, and (3) enhancing product competitiveness with the environmental contribution of products. During fiscal 2017, we established approximately 100 environmental goals across the entire Group and carried out these improvement activities. We plan to expand this setup to each of our sites in Asia.

Initiatives to prevent global warming and save energy

Each TEL factory and office has an established goal of reducing energy consumption by at least 1% year-over-year. Initiatives to achieve this goal include energy-saving clean room operation, appropriate temperature settings for office cooling and heating, and the introduction of highly energy-efficient equipment. Tokyo Electron Miyagi, for instance, achieved more energy-efficient operation by installing a turbo refrigerator, resulting in a reduction of energy consumption. It set an environmental goal of reducing the power consumption of its turbo refrigerator by an average of 20% in the first half of fiscal 2017, by an average of 30% in the second half, and by an annual average of 25% (year-over-year). Tokyo Electron Miyagi achieved its goal with an average 22.6% reduction in the first half, an average 34.8% reduction in the second half, and a 26.3% reduction across the full year.

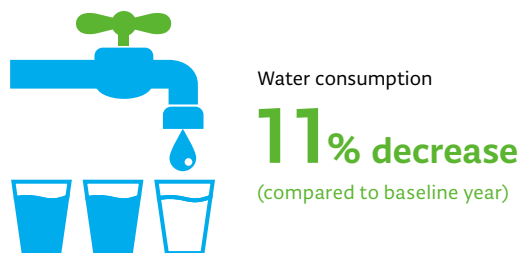
In addition, LED lighting has been installed at our factories and offices in Japan, and photovoltaic power generation systems have been installed at some of these sites, generating 4,436 MWh of renewable energy in fiscal 2017. Tokyo Electron U.S. Holdings in the United States has also been actively engaged in activities including the ongoing purchase of green power, 3,334 MWh in fiscal 2017.

As a result of these initiatives, power consumption was 253 GWh in fiscal 2017, down 0.4% year-over-year; and CO₂ emissions from energy consumption* were 141 kilotons, down 4.3% year-over-year. Goals were also achieved at seven of our 11 worldwide factories and offices that had reduction goals.

* In calculating CO₂ emissions, the emission factor for TEL's electricity consumption in Japan in fiscal 2017 was substituted by adjusted emission factors for the electrical power providers concerned. The emission factor for TEL's overseas electricity consumption was substituted by estimated factors calculated by the Federation of Electric Power Companies of Japan based on values published by the International Energy Agency (IEA).

Initiatives to reduce water consumption

TEL has established a goal of keeping water consumption at the same level or below that of the baseline year (fiscal 2012 for factories and offices in Japan and a fiscal year of their choosing for each overseas operation). In fiscal 2017, we achieved 10 of the 14 goals at our sites worldwide. Continued efforts to achieve these goals include installing water-saving devices, watering lawns with rainwater, and implementing intermittent operation of cafeteria faucets. Overall, we reduced water consumption by 1.9% year-over-year to 1,055,000 m³ in fiscal 2017, and we discharged an estimated 874,000 m³ of wastewater.



Initiatives to reduce waste

TEL is contributing to waste reduction and recycling whenever possible by sorting waste and switching to waste-free production processes. When not possible, we appropriately dispose of non-recyclable waste. We also put a great deal of effort into waste sorting activities and participate in the electronic manifest system¹ to ensure proper waste management.

One example of our initiatives is the Koshi Factory in Kumamoto, where activities were undertaken to reduce the amount of inventory being disposed of as waste. To better utilize inventory, active efforts were made to rework components with low demand and to control inventory changeover with design changes. The factory successfully achieved reductions in terms of both waste and cost, reusing about 40% of inventory (based on cost) that would have been disposed of the previous year.

In fiscal 2017, we generated 112 tons of incinerated and landfill waste in Japan. As a result of our waste-reduction initiatives, the recycling rate² at sites in Japan in fiscal 2017 was 99.0%, achieving our goal of maintaining a recycling rate of 97% or higher for the 11th consecutive year since fiscal 2007. The recycling rate for our overseas factories and offices was 91.5%.

1 Electronic manifest system: A system for electronically tracking the flow of industrial waste instead of using paper-based manifests (i.e. paper forms for tracking industrial waste). The system uses a communications network of data processing centers, businesses that generate waste, and waste collection/disposal companies.

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

Management of chemical substances

[URL tel-csr.disclosure.site/en/themes/182](https://tel-csr.disclosure.site/en/themes/182)

TEL uses chemical substances in our product development and manufacturing phases. The use and release of chemical substances that are under the purview of the Japanese PRTR³ law are consistently monitored and managed.

3 Pollutant Release and Transfer Register (PRTR): A framework for tracking, tabulating, and disclosing quantitative data on chemical substances that may be hazardous to human health and the ecosystem, including the amounts used and discharged into the environment and the amounts transferred (as part of waste) off the original business's premises

Logistics initiatives

[URL tel-csr.disclosure.site/en/themes/181](https://tel-csr.disclosure.site/en/themes/181)

As transport regulations become more stringent and the demand for a lower impact on the environment rises, TEL has been promoting modal shifts⁴ and other activities designed to reduce the environmental burden of its logistics.

4 Modal shift: A change in the mode of transport; specifically, switching from conventional freight transport by truck or aircraft to a means that has a lower impact on the environment, such as rail or ocean

Biodiversity

[URL tel-csr.disclosure.site/en/themes/182](https://tel-csr.disclosure.site/en/themes/182)

TEL's activities impact biodiversity while also benefiting from it. In recognition of this, we promote activities for the conservation of biodiversity.

Environmental communication

[URL tel-csr.disclosure.site/en/themes/182](https://tel-csr.disclosure.site/en/themes/182)

TEL maintains close communication with its stakeholders to promote its initiatives for the environment.

Supply chain management

Procurement Policy

In order to build sustained, trust-based relationships with suppliers and to maintain mutual growth, TEL has released a Procurement Policy and conducts procurement activities based on this. In fiscal 2017, we revised our Procurement Policy and our Procurement Policy–Supplement to include our review of the content of conflict minerals initiatives and reflect the EICC Code of Conduct. We informed suppliers of these revisions, including the request to comply with the EICC Code of Conduct. We joined EICC in June 2015.

CSR procurement

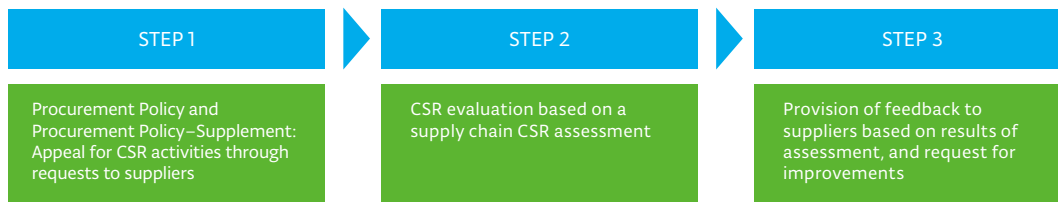
TEL is committed to building and maintaining a robust and sustainable supply chain. In addition to sharing our Procurement Policy, Procurement Policy–Supplement, EICC Code of Conduct, and Guideline for Green Procurement, we also promote CSR activities with suppliers. Our promotion includes respect for fundamental human rights, strict compliance with labor laws and regulations, and reduction of environmental impact.

* 500 employees or more

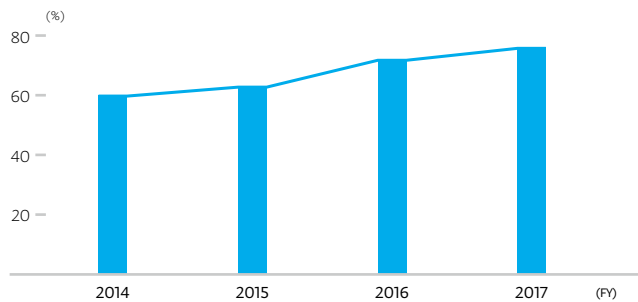
Since fiscal 2014, we have also conducted a CSR Survey with the aim of keeping track of suppliers' engagement in CSR activities. During fiscal 2017, we conducted a supply chain CSR assessment based on the EICC Code of Conduct with key suppliers (accounting for more than 80% of our procurement spend). Improvements in overall rating level were observed at 17% of suppliers and improvements in overall raw score were seen at 59%. We provided responses, results, and overall assessments as feedback to suppliers and as support for their improvement activities.

The results of the survey showed that no suppliers were engaged in any of the practices given particular emphasis in the EICC Code of Conduct, namely child labor, forced labor, bonded labor, inhumane treatment, false reports, falsification of records, or bribery. Also, no suppliers had a sufficient number of employees* to be considered high risk in terms of compliance.

Supply chain CSR process



Percentage of suppliers rating highly in supply chain CSR assessment



Conflict minerals

TEL regards taking action against conflict minerals¹ an important part of corporate social responsibility. Our resolute goal is to eliminate the use of any parts or components with raw materials that include conflict minerals obtained through illegal exploitation, including sources with human rights violations or poor working conditions.

In fiscal 2017, we conducted our third annual survey on countries of origin and smelters of potential conflict minerals, using the Conflict Minerals Reporting Template (CMRT) developed by CFSI.² As a result, we identified 237 CFSP³ compliant smelters, providing us confidence that 3TG sourced from these smelters were conflict-free. None of the materials procured were found to contain 3TG conflict minerals. This survey will continue every year, with the cooperation of suppliers, to further improve the quality and accuracy of the survey.

- 1 Conflict minerals: 3TG (tantalum, tin, tungsten and gold)
- 2 Conflict-Free Sourcing Initiative (CFSI): Founded by members of the EICC and GeSI (Global e-Sustainability Initiative), the CFSI inspects 3TG smelters to certify they do not have conflict minerals
- 3 Conflict-Free Smelter Program (CFSP): The CFSP is promoted and led by the CFSI

Procurement BCP

As part of its business continuity plan (BCP), TEL collaborates with suppliers for disaster preparation. 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. Following an earthquake or other disaster, we also survey suppliers registered in the affected location to assess impact to their operations. During fiscal 2017, about 17,000 supplier sites were registered, and post-disaster surveys were conducted six times. Following the Kumamoto Earthquake, the survey of impacted suppliers was carried out the same day. Consequently, our collaboration for recovery was quicker and smoother than at the time of the Great East Japan Earthquake. Also during fiscal 2017, we requested suppliers to evaluate their fire-prevention systems, and we shared this information internally along with activities to recover from fire damage.

According to a BCP survey of key suppliers (accounting for more than 80% of our procurement spend) improvements in overall rating level were observed at more than 32% of suppliers and improvements in the overall raw score were seen at more than 56%. Responses, results, and overall assessments were given as feedback to suppliers to promote further improvement.