



Sustainability Report 2019

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Sustainability

About the "Sustainability" Website

TDK provides information disclosure on sustainability primarily on this website.

The Sustainability Website presents comprehensive and detailed information about the sustainability of the TDK Group.

To facilitate reading, the information is also presented as PDF, separated into the two media below.

- Sustainability Communication Book

The efforts of the TDK Group related to sustainability are presented, with a focus on specific initiatives which the Group wishes to highlight.

- Sustainability Report

A downloadable PDF file that contains all of the information on the Sustainability Website.

- Reference Guidelines

Global Reporting Initiative (GRI) Sustainability Reporting Standards 2016

- Period covered

FY2018 (April 1, 2018 to March 31, 2019)

Some information covers activities outside this period.

- Organizations covered

TDK Group (TDK Corporation and 139 consolidated subsidiaries in Japan and overseas)

- Major organizational changes during the period covered:

None

- Scope of data

As a rule, data refers to the TDK Group. Separate indications are given if data pertains only to a specific site.

In order to clearly show the state of progress, data is usually given for successive years (with some exceptions).

In order to improve the objectivity of environmental performance data, Third-party review and verification were conducted by SGS Japan Inc.

Related links

[Third-Party Review of Environmental Performance Data](#)

[Third-Party Verification](#)

- Last website update

As this is a yearly report, data are updated once per year.

September 2019 (previous update: September 2018; next update scheduled for September 2020)

- Contact

CSR Group, Sustainability Promotion HQ: +81-3-6778-1059

- Caution regarding forward-looking statements

Certain information on the Sustainability Website contains forward-looking statements such as plans, policies, management strategies, targets, schedules, understandings, and evaluations with respect to the TDK Group. These forward-looking statements are based on the current forecasts, estimates, assumptions, plans, understandings, and evaluations of the TDK Group in light of information currently available to it, and contain known and unknown risks, uncertainties, and other factors. The TDK Group therefore wishes to caution readers that, being subject to risks, uncertainties, and other factors, the TDK Group's actual results, performance, achievements, or financial positions could be materially different from any future results, performance, achievements, or financial positions expressed or implied by these forward-looking statements.

Sustainability

TDK Group Outline

The TDK Group is active in over 30 countries and regions all over the globe, selecting suitable bases for plants, research facilities, and sales offices from the viewpoints of marketability, product range, distribution, etc. The TDK Group consists of 139 consolidated subsidiaries—13 in Japan and 126 overseas (59 in Asia, 45 in Europe, and 22 in the Americas). The Group's total work force is 104,781 persons.

Net sales **1,381,806** million yen

Operating income **107,823** million yen

Net income **82,205** million yen

Americas

Net sales **110,169** million yen
(External) (8.0 %)

Number of employees **4,738**
(Internal) (4.5 %)

Europe

Net sales **167,285** million yen
(External) (12.1 %)

Number of employees **8,205**
(Internal) (7.8 %)

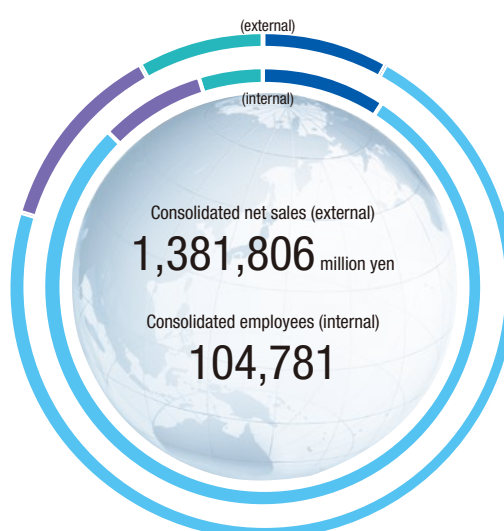
Japan

Net sales **113,369** million yen
(External) (8.2 %)

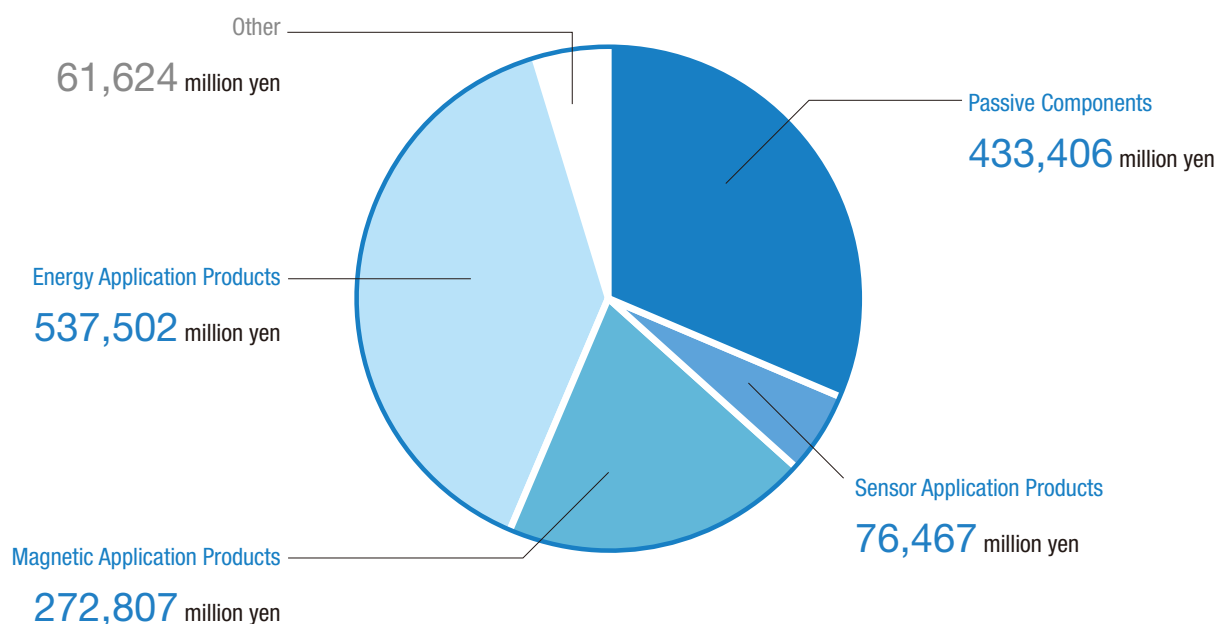
Number of employees **9,777**
(Internal) (9.3 %)

Asia and others

Net sales **990,983** million yen
(External) (71.7 %)

Number of employees **82,061**
(Internal) (78.3 %)


Net sales by product segment (fiscal year ended March 2019)



Sustainability

Top Commitment



Seizing on a turning point in digital technology and energy

Our world today is facing a major turning point. Since the Industrial Revolution, people have enriched their lives through the use of fossil fuels. But as problems such as climate change and the depletion of fossil fuels worsen, the need to establish a new kind of energy society has become unavoidable. Meanwhile, dramatic advancements in IoT and AI have reshaped industry and wrought major changes in how information is communicated.

Over the past four years, approximately six billion smartphones were shipped worldwide, and we are now living in a world where social media—said to represent more than 2.5 billion accounts—can alter the very shape of public discourse.

We interpret these major trends in two ways: as digital transformation (“DX”) and as energy transformation (“EX”). DX and EX cannot be accomplished without electronics, and I believe that for TDK, these transformations represent a treasure trove of opportunities to contribute to society.

In DX, we will work to optimize manufacturing through the use of digital data, as set forth in Industry 4.0. This will enable us to reduce losses of every kind—from energy, to resources, to time—and will also lead to achieving zero-defect product quality. TDK as a whole needs to undertake its own digital transformation, and I believe that this effort will deliver value that can be passed on to society.

In terms of EX, TDK—a company focused on electricity and magnetism—has pursued energy conversion efficiency as a means of maximizing the effect of even small amounts of energy. Even as we continue to seek further reductions in energy consumption through our proprietary technologies, it is important that we approach the issue not by simply replacing fossil fuels with natural energy, but based on efforts to explore ways of using as little energy as possible. TDK Group’s contributions to building a richer, more convenient society will require more than our own efforts as a manufacturer of components—inevitably, collaboration with companies responsible for systems and hardware will also be necessary.

Seeking to “Advancing the development of a sustainable society and promoting well-being for all people”

The global economy is undergoing significant destabilization due to trade friction between the US and China, a slowdown in the Chinese economy, Brexit, and other factors. Still, this is unlikely to alter the DX and EX tide. Rather than getting caught up in short-term changes, we instead maintain a medium- and long-term perspective in responding flexibly to change.

Believing in the need for a roadmap to a sustainable future society, and seizing on global trends centered around DX and EX, in fiscal 2019 TDK established its Sustainability Vision. The goal of this vision is “Through its innovative core technologies and solutions, TDK Group advances the development of a sustainable society and champions well-being for all people.”

Along with our Sustainability Vision, “Value Creation 2020,” the Medium-Term Plan launched in fiscal 2018, addresses not only Commercial Value (Execute Growth Strategy) and Asset Value (Improve Asset Efficiency), but also Social Value (Enhance Enterprise Value). The inclusion of Social Value has enormous significance. More than just one of three parallel supporting concepts, Social Value will, if anything, propel the other two forward. Contributing to society (Social Value) leads to growth (Commercial Value), which allows for the efficient use of profits and assets (Asset Value). Those in turn can be leveraged toward further contributions to society, a cycle that will enable us to balance social development and growth for TDK.

To enhance Social Value, it is essential that we contribute to sustainable development goals (SDGs). Companies are being asked to take an active role in this effort, and at TDK, we see the challenges of addressing the global-scale social issues laid out in the SDGs as a major business opportunity. There are, for example, many parts of the world that still have no access to electricity; instead of installing transmission lines, deployment of solar panels, wind turbines, and storage batteries makes it possible to introduce electrification with a single effort, based entirely on renewable energy.

Building a strong, resilient organization through empowerment and transparency

The fields in which we can utilize our technologies and solutions are expanding worldwide.

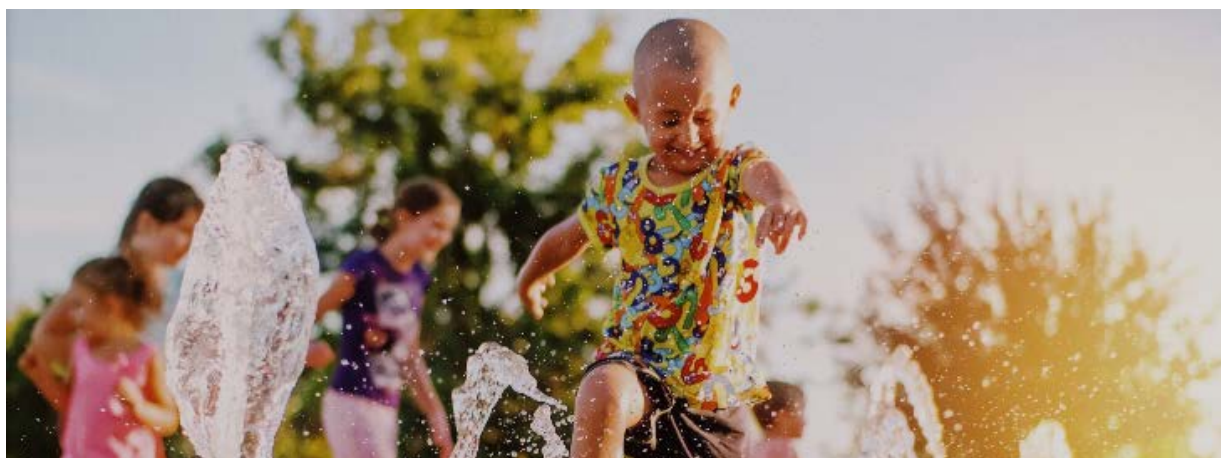
With non-Japanese nationals representing more than 90% of our employees, one of TDK’s advantages has always been the global diversity of our personnel. Combining the respective strengths of those individuals helps build an organization capable of responding to change with resiliency and strength. Over time, we have engaged in a variety of M&As; rather than expecting these newly acquired companies to take on TDK’s culture, we hope that the mutually beneficial impact we have on one another will allow the TDK Group as a whole to change anew.

At the same time, governance is an important corporate issue, one that I think comes down to valuing empowerment and transparency. This means trusting and motivating the people with whom you share your goals and philosophies. It means ensuring transparency for stakeholders, with both sides remaining open and honest with one another. In other words, in an age in which a centralized approach no longer works, strength lies in an autonomous, distributed, and resilient organization.

As we take on the challenges of this major turning point, the TDK Group sees its corporate motto and corporate principles as a foundation. I would like all of our employees to constantly consider what they can do to benefit society. This includes thinking about what kind of value each of us can offer our customers, suppliers, the global community, and other stakeholders, and understanding the importance of reexamining our own work from an outside perspective. In this way, the TDK Group as a whole will contribute to realizing a sustainable future society.

Sustainability

Sustainability Vision



TDK Group's Sustainability Vision

Various issues exist in the society surrounding the TDK Group, including environmental problems, such as climate change, energy, and the exhaustion of resources, and social problems, such as aging and the digital divide. TDK will contribute to the solution of these problems and the building of a sustainable society for future generations.

As well as aiming to solve social problems through our business on the basis of our corporate philosophy, which is our fundamental stance, we have formulated a new TDK Group's Sustainability Vision. This vision proclaims that by fully utilizing TDK's proprietary core technologies and solutions, we will "Advancing the development of a sustainable society and promoting well-being for all people."

In the formulation of this vision, we again assorted the social environment surrounding us from a long-term perspective and studied the potential of the TDK Group's strengths and resources. In the process, we heard the opinions of not only management but also external experts.

From now on we will share this vision throughout the Group, put it into practice in our business, and consider and implement specific measures toward the realization of a happy society.

TDK Group's Sustainability Vision

"Technology for well-being of all people"

TDK Group strives to restore and protect the global environment while promoting respect for human rights.

Through its innovative core technologies and solutions, TDK Group advances the development of a sustainable society and champions well-being for all people.

"TDK Group Sustainability Vision" was established in April 2019, considering it to be important to describe a sustainable future society.



Contribution to Sustainability Through Business

In “Value Creation 2020,” the TDK Group’s Medium-Term Plan, we aim to contribute to society by creating the three values making up corporate value—namely, Commercial Value (execute growth strategy), Asset Value (improve asset efficiency), and Social Value (enhance enterprise value)—and, as a result, to grow our business.

Among these, we believe that Social Value—in other words, aiming to realize a sustainable society and company—is the starting point of the cycle toward other value creation. It means nothing other than practicing the Sustainability Vision’s goal of realizing a “Advancing the development of a sustainable society and promoting well-being for all people.” and is also consistent with our corporate motto.

By further strengthening our unique competitive advantages ((1) material and process technologies, (2) customer base, (3) strength in diversity, (4) global business bases, and (5) integrated production) and promoting our Medium-Term Plan, which incorporates the thinking of this Sustainability Vision, we will endeavor to contribute to sustainability through our business.

TDK’s Priority Markets and Social Issues

In anticipation of social and industrial changes from now on, the TDK Group targets mainly the automotive, ICT (information and communication technology), and industrial and energy markets. In these markets, in addition to technological changes and the diversification of customer needs, efforts are required to solve issues and create new values toward the realization of a sustainable society.

Main social issues in TDK’s priority markets

Automotive

- Traffic accidents
- Exhaustion of resources (scarce resources)
- Atmospheric and environmental pollution
- Etc.

ICT

- Explosive increase in amount of information
- Privacy and leakage of personal information
- Acceleration of urbanization and depopulation
- Etc.

Industrial and Energy

- Climate change (increased use of fossil fuels)
- Decrease of energy loss (highly efficient use of energy)
- Exhaustion of resources
- Etc.

In response to these issues, TDK, as stated in our Sustainability Vision, aims to “Advancing the development of a sustainable society and promoting well-being for all people.”“ by creating new values required by customers through the dual provision of solutions based on the idea of Kotozukuri (integrated solutions) and our trademark Monozukuri (manufacturing excellence).

Sustainability | TDK Group's Sustainability

Corporate Philosophy and Sustainability

[Corporate Philosophy](#)
[Corporate Vision and "TDK Value" Guidelines Established With a View Towards 100-Year Anniversary](#)
[The TDK Group's Behavior Guidelines: TDK Code of Conduct](#)
[A Sustainable Society Created through Business Activities](#)

Corporate Philosophy

TDK's corporate motto of "contributing to culture and industry through creativity" reflects the spirit of the company's founder and first president, Kenzo Saito who achieved the commercialization of ferrite. Together with the corporate principles of Vision, Courage, and Trust, this expresses our management philosophy in a nutshell.



Corporate Vision and "TDK Value" Guidelines Established With a View Towards 100-Year Anniversary

For a company to grow and thrive, it is necessary to grasp the spirit of the times and have the ability to adapt its stance, while remaining always true to its underlying principles and the company's philosophy.

In 2015, TDK celebrates the 80th anniversary of its founding, and a new Corporate Vision along with a set of Action Guidelines have been formulated for this occasion. These platforms outline a path for the company to follow as it heads towards its 100-year milestone in 2035. They define in concrete terms how to put the management philosophy into practice.

The Corporate Vision summarizes the founding spirit of the company, the four major innovations of the past, the contribution to utilizing global resources, and the stance towards the corporate motto. While illuminating the TDK vision from the viewpoints of the past, the present, and the future, the vision also draws up the picture of the company that TDK aims to be as we move towards our 100th anniversary.

The "TDK Value" guidelines comprise four categories that describe a concrete outlook for the future, evolving from the foundation and the company culture that TDK has built up over the years. The platforms will be shared and put into practice by all members of the TDK Group.

Corporate Vision -Vision2035-

TDK was founded in 1935, based on the founder's vision and belief - "contribute to the advancement of the society through the commercial production of ferrite, a magnetic material which originates from Japan".

TDK achieved four world-class innovations including "ferrite, magnetic tape, multilayer materials, magnetic heads", and has been offering products to support the advancement of the society.

TDK will continue to strive to achieve further innovation and create value for customers through the delivery of outstanding quality products and services, by utilizing the diverse global resources.

Based on TDK's corporate motto, TDK will continue to "contribute to culture and industry through creativity", by revitalizing and protecting the global environment and creating a pleasant and safe society.

TDK Value

Category	Value
Customer Focus	<p>We have;</p> <ul style="list-style-type: none"> - Strong determination to contribute to our customers' success - Passion to be a trusted partner for our customers <p>Therefore we can;</p> <ul style="list-style-type: none"> - Deliver inspirational value by standing in the customer's shoes - Offer outstanding quality products, services and technology to satisfy our customers
Challenge	<p>We have;</p> <ul style="list-style-type: none"> - Culture to turn adverse challenges into chances to develop ourselves - Strong determination to accomplish our business goals by overcoming adversity <p>Therefore we can;</p> <ul style="list-style-type: none"> - Accept challenges to make innovative breakthroughs and continue to create new value - Lead our colleagues and collaborate as a team by sharing the same value
HR Development	<p>We have;</p> <ul style="list-style-type: none"> - Aspiration to continuously improve ourselves - Motivation to contribute to the advancement of society and growth of businesses <p>Therefore we can;</p> <ul style="list-style-type: none"> - Define clear vision/goals and drive ourselves to achieve them - Support the development of our colleagues and build enthusiastic teams
Diversity	<p>We have;</p> <ul style="list-style-type: none"> - Global network with diverse culture - Teams which respect each other and teamwork which encourages development <p>Therefore we can;</p> <ul style="list-style-type: none"> - Embrace different ideas and opinions - Clearly express our opinions with sincerity through open discussions

The TDK Group's Behavior Guidelines: TDK Code of Conduct

The TDK Code of Conduct stipulates specific behavior guidelines so that the TDK Group and all of its directors and employees comply with the requisite laws, ordinances and social norms. The code was revised in August 2016 following clarification of relations with TDK's managerial philosophy and the specific content of corporate standards of business conduct. Furthermore, the TDK Group has compiled the TDK Charter of Corporate Behavior outlining the universal matters that should be practiced commonly by the Group.



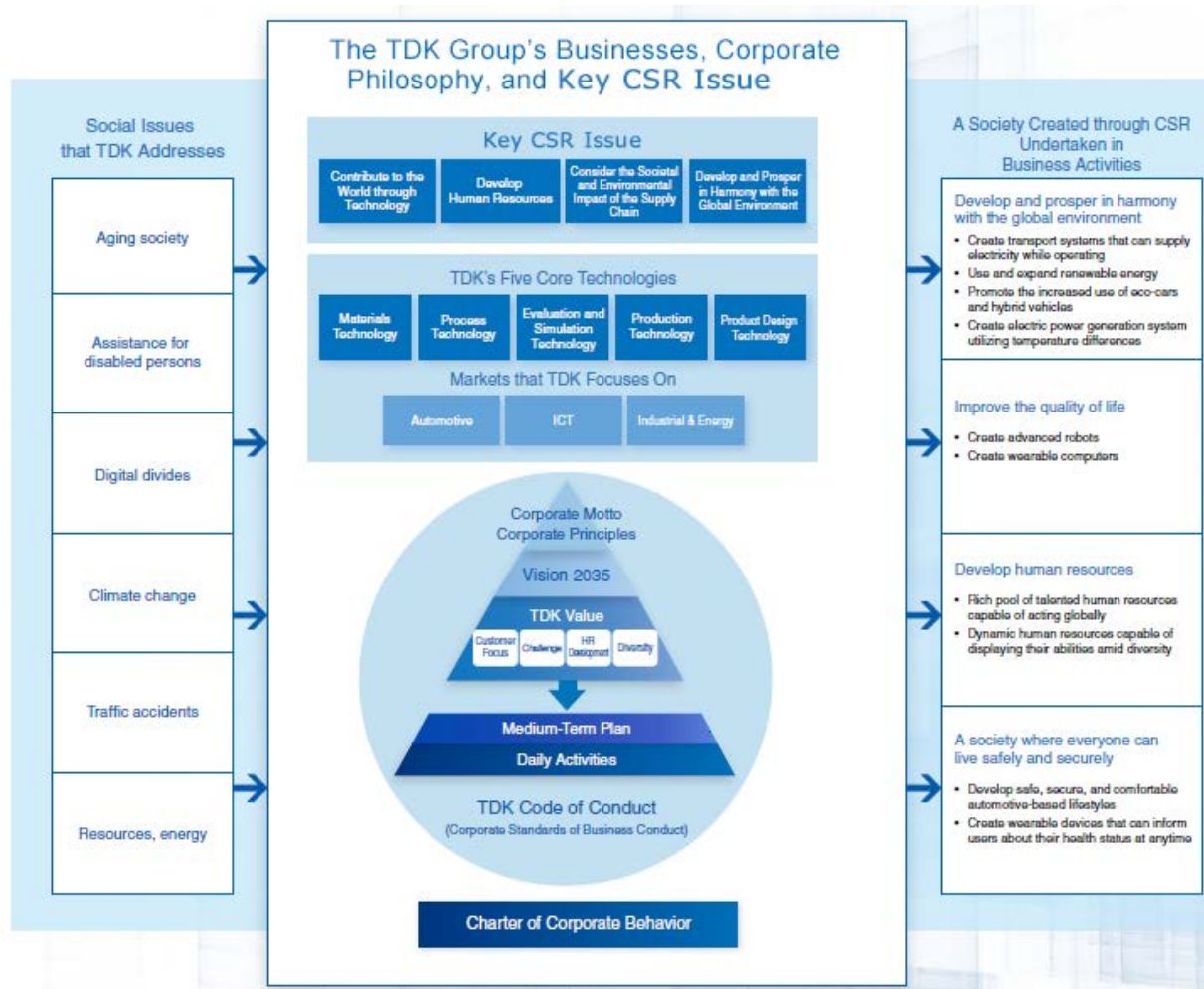
Related links

[TDK Code of Conduct](#)

A Sustainable Society Created through Business Activities

Our society is facing various issues.

The TDK Group seeks to solve social issues through business activities based on our corporate principles.



Related links

[Sustainability Vision](#)

Sustainability | TDK Group's Sustainability

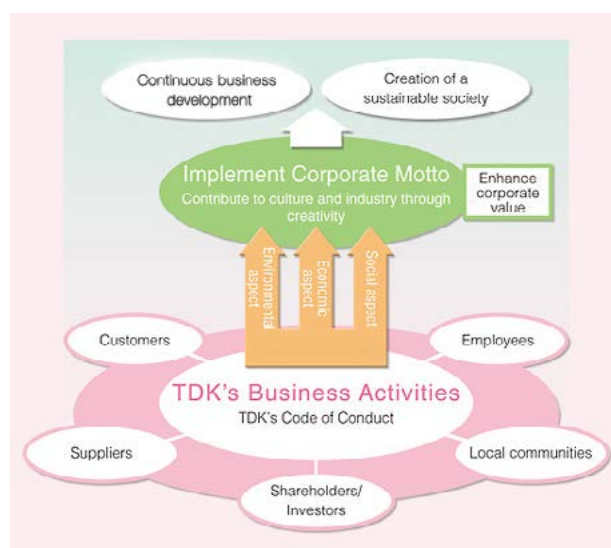
Sustainability Management

Linkage between TDK Group's Sustainability and the Corporate Philosophy	Promotion Structure
Awareness within the Company	Dialogue with Stakeholders and Gathering of Opinions
Major Member Organizations	About the SDGs
Key CSR Issues	

Linkage between TDK Group's Sustainability and the Corporate Philosophy

The TDK Group's approach to Sustainability, which is also expressed in the Sustainability Vision, means pursuing to "Advancing the development of a sustainable society and promoting well-being for all people." The basis of these activities is practice of the TDK corporate motto and thorough implementation of corporate ethics. Recognizing that TDK is a social entity supported by stakeholders, such as customers, suppliers, employees, shareholders, investors, and local communities, we promote sustainability through our business activities on the basis of the TDK Code of Conduct and maintain communication with these stakeholders.

By carrying out the TDK corporate motto, we increase corporate value, and subsequently contribute to continuous corporate development and the creation of a sustainable society.



Promotion Structure

The Sustainability Promotion HQ was established directly under the President as a structure for the implementation of sustainability-related initiatives.

Directly below the Sustainability Promotion HQ, the CSR Group proposes policies relating to sustainability, disseminates those policies throughout the entire TDK Group, monitors the status of implementation, discloses information, conducts dialogues with stakeholders, and provides feedback regarding the various opinions received from outside the Group as well as issues identified through activities to management, divisions, business groups at headquarters, and individual business sites.

Based on this process, TDK Group responsive policies are set and reflected in the execution of management as appropriate. The CSR Group and each division at headquarters carry out measures through deployment of the policies and programs reflected in management in business groups and at business sites.

Awareness within the Company

The TDK Group believes that raising the awareness of each employee is essential for promoting sustainability and provides lecture-style CSR training in training programs for specific ranks of employees, such as training for new recruits, and e-learning for all employees.

In response to the identification of “social value” as one of the pillars in its Medium-Term Plan, in fiscal 2018 the TDK Group bolstered measures that contribute to society through sustainable corporate activities by conducting lecture meetings and other events for management and emphasizing the importance of sustainability in internal newsletters.

Related links

[Contributing to SDGs](#)

Dialogue with Stakeholders and Gathering of Opinions

As a company operating business activity on a global scale, TDK endeavors to accurately understand social issues, respect international standards of conduct and guidelines relating to sustainability, and gain trust from society by responding to matters of interest to stakeholders through our business activities. For this purpose, we actively strive to create opportunities for dialogue with stakeholders on a regular basis.

Opportunities for dialogue with stakeholders

[Customers]

Daily business activities

CS surveys

Audits by customers

[Suppliers]

Daily response to suppliers

Explanatory meetings for suppliers

Audits of suppliers

[Employees]

Labor-management dialogue

Feedback to in-house newsletter

[Shareholders/investors]

Performance briefings

General meetings of shareholders

IR meetings

[Local communities]

Informal community meetings

Social contribution activities

Website answer service

Related links

[Dialogue with Stakeholders](#)

Major Member Organizations

TDK belongs to the following organizations, with a view to addressing social issues that cannot be effectively resolved by a single company.

Organization	Overview
Japan Business Federation	http://www.keidanren.or.jp/en/profile/pro001.html
Japan Electronics and Information Technology Industries Association (JEITA)	http://www.jeita.or.jp/english/about/what/index.htm (policy administrator)
Joint Article Management Promotion-consortium (JAMP)	https://chemsherpa.net/english (founding member company, since 2007)
Japan Business Council in Europe (JBCE)	https://www.jbce.org/about-us/who-we-are/about-jbce/

About the SDGs

Related links

[Contributing to SDGs](#)

[Sustainable Development Goals \(SDGs\)](#)

Key CSR Issues

We have stipulated key issues in CSR activities with the aims of realizing a sustainable society. We have identified social issues surrounding the TDK Group from the perspectives of both the TDK Group itself and stakeholders. These Key CSR Issues are being addressed by the TDK Group as a whole.

Related links

[The TDK Group's Materiality](#)

Sustainability | TDK Group's Sustainability

The TDK Group's Materiality

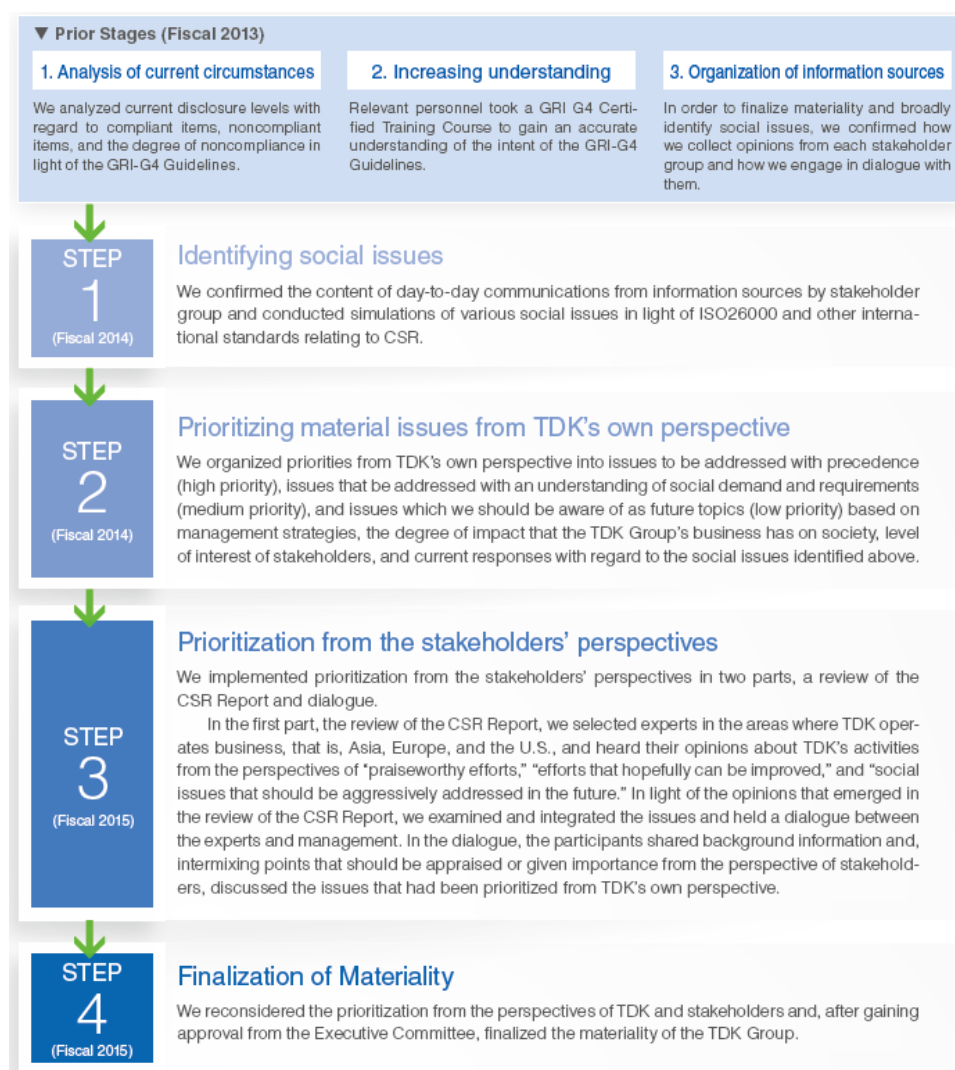
TDK believes it is important to promote CSR activities that respond to changes in stakeholders and the social and business environment surrounding the Group. From fiscal 2013 TDK has promoted the study of materiality in accordance with the fourth edition of the Global Reporting Initiative guidelines (GRI-G4), and in fiscal 2015, with the approval of management, we finalized our materiality.

[Materiality Finalization Process](#)
[Finalization of Materiality](#)
[Fiscal 2018 Activity Goals and Achievements, Fiscal 2019 Goals](#)

Materiality Finalization Process

GRI-G4 made a revision from requiring comprehensive information disclosure to requiring information disclosure with a focus on materiality. The objective of this revision was to encourage companies to determine their reporting content purposefully by getting management to be more deeply involved in CSR.

TDK held discussions with stakeholders outside the company, implemented a dialogue with management, and finalized materiality through the following process.

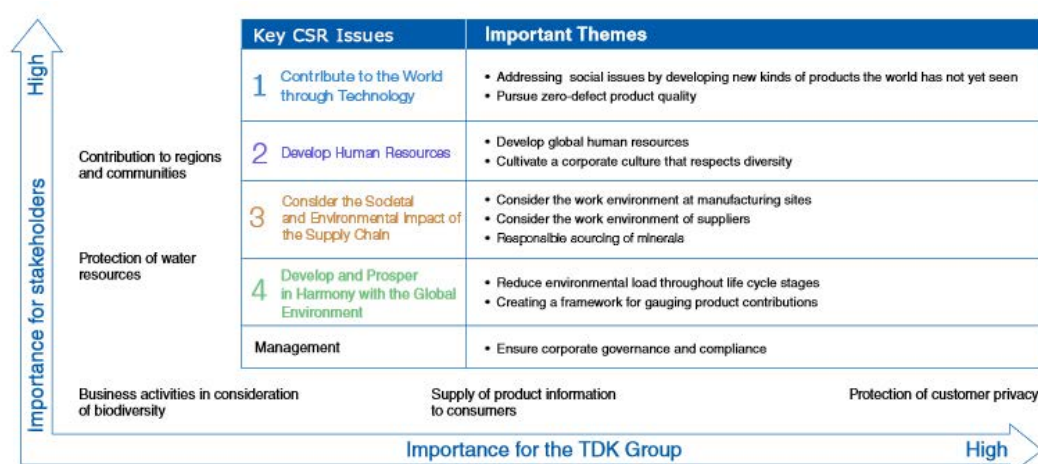


Related links

[Opinions of Experts \(CSR Report 2015 Review\)](#)
[Toward the Finalization of Materiality to Enhance TDK's Value](#)

Finalization of Materiality

The prioritization in Steps 2 and 3 was conducted on the basis of 46 items chosen in consideration of items required by the GRI-G4, and 19 material issues were identified. These issues were further sorted and classified and finally condensed into the following 10 important themes for the promotion of activities from now on. After approval has been received from the Executive Committee, the competent departments in the TDK headquarters are taking the initiative in setting key performance indicators (KPI) in coordination with TDK Group companies in order to promote related activities.



Key CSR Issues	Important Themes	Main Points
Contribute to the World through Technology	Addressing social issues by developing new kinds of products the world has not yet seen	TDK aims to solve social issues through unique technological development.
	Pursue zero-defect product quality	On the basis of our high level of technology, we will pursue zero-defect product quality through uniformly managed production processes from materials to manufacturing.
Develop Human Resources	Develop global human resources	Toward the promotion of genuine globalization, we will strive to develop the human resources that will serve as its foundation.
	Cultivate a corporate culture that respects diversity	In order to continue generating innovative creativity, we will build a tolerant corporate culture that respects the diversity of human resources.
Consider the Societal and Environmental Impact of the Supply Chain	Consider the work environment at manufacturing sites	In light of the latest requirements, we will gauge considerations for the labor environment at production sites, which we need as a supplier, and if necessary implement education and guidance toward improvement.
	Consider the work environment of suppliers	In light of the latest requirements, we will gauge considerations for the labor environment at suppliers, which we need as a buyer, and if necessary implement education and guidance toward improvement.
	Responsible sourcing of minerals	We will execute our social responsibility as a midstream company appropriately through the continued implementation of required efforts and an understanding of the latest requirements.
Develop and Prosper in Harmony with the Global Environment	Reduce environmental load throughout life cycle stages	We will promote environmental activities on the basis of the TDK Environmental Vision 2035.
	Creating a framework for gauging product contribution	Through the setting of common gauging product contributions in the industry, we will promote social understanding of TDK's environmental contribution value.

Fiscal 2018 Activity Goals and Achievements, Fiscal 2019 Goals

Related links

[Contribution to the World through Technology](#)
[Develop Human Resources](#)
[Consider the Societal and Environmental Impact of the Supply Chain](#)
[Develop and Prosper in Harmony with the Global Environment](#)

Sustainability | TDK Group's Sustainability

Contributing to SDGs



TDK Group Contributions to SDGs

In September 2015, in order to make the global environment and people's lives sustainable, the United Nations General Assembly approved the Sustainable Development Goals (SDGs), consisting of 17 goals and 169 targets to be achieved by all countries by 2030. From fiscal 2018, TDK announced the Medium-Term Plan "Value Creation 2020" as its basic plan of action, aiming for sustainable growth through creation of three values. Realization of one of these—Social Value (enhance enterprise social value)—is closely tied to the achievement of SDGs. Creating social value to address issues facing society is no more than the realization of TDK's corporate motto of "Contribute to culture and industry through creativity." TDK seeks to enhance corporate value by contributing to solutions to global-scale issues identified as SDGs through its business.

SUSTAINABLE DEVELOPMENT GOALS

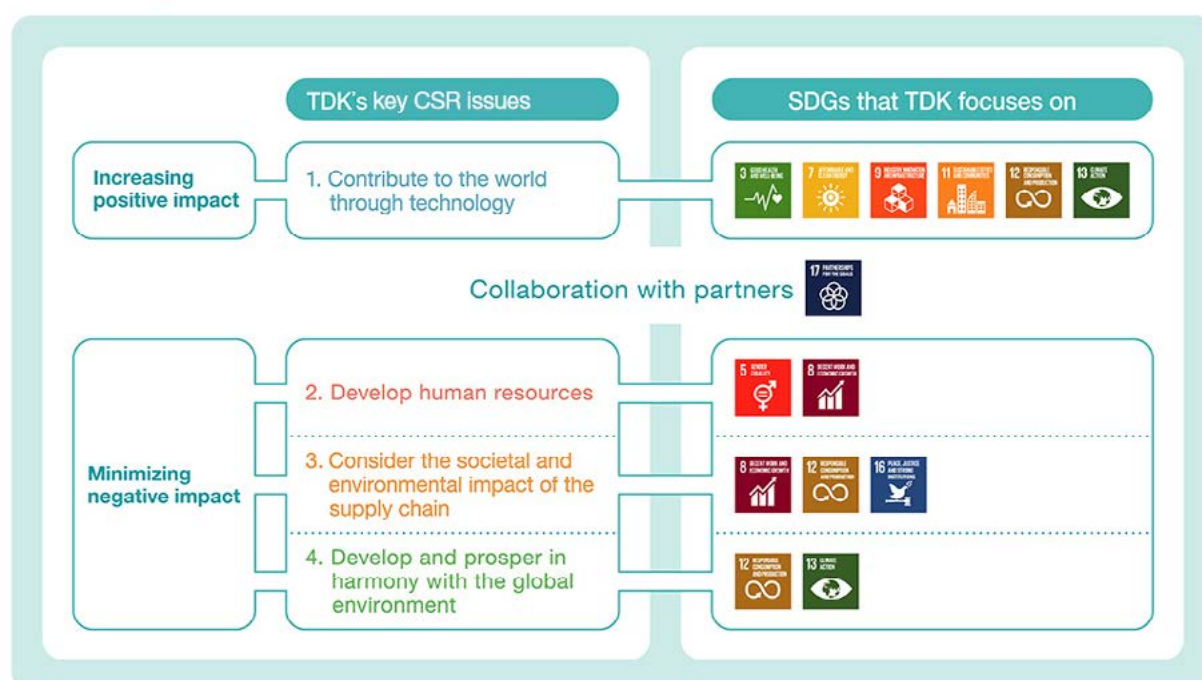
17 GOALS TO TRANSFORM OUR WORLD



TDK Group's key CSR issues and SDGs

TDK seeks to realize a sustainable society, identifying “Contribute to the world through technology,” “Develop human resources,” “Consider the societal and environmental impact of the supply chain,” and “Develop and prosper in harmony with the global environment” as key issues guiding CSR activity. TDK’s “Contribute to the world through technology” are based on TDK technology/products and the external social environment, focusing on fields enabling maximized provided value through SDGs (in following chart, SDGs corresponding to “1. Contribute to the world through technology”). TDK has clarified social challenges behind these 6 goals and contributes to realization of an ideal society in which these challenges are solved through its technology and products. TDK further implements initiatives toward “Develop human resources,” “Consider the societal and environmental impact of the supply chain,” and “Develop and prosper in harmony with the global environment,” thereby contributing to the various SDGs.

● TDK's key CSR issues and SDGs



Intra-corporate Outreach Facilitating Comprehension of SDGs

TDK promotes in-house comprehension of SDGs, regularly sponsoring lectures and workshops in every division for every employee stratum to strengthen fundamental awareness of contributing to SDGs through corporate operations.

SDGs workshops

In fiscal 2018, management workshops addressed the theme of SDGs and ESG (Environment, Society, and Governance). External experts were invited to lecture, generating lively discussion on issues such as: “the sustainability promotion dilemma of promoting a long-term perspective vs. safeguarding short-term profits,” “promoting awareness in a corporation of over 100,000 employees,” and “when employees have a strong sense of how their daily work contributes corporate profits while benefiting society, their motivation level will rise.” The workshops reinforced the importance of keeping “Kotozukuri (integrated solutions) business” in mind vis-à-vis contributing to CSR issues and SDGs while aiming for sustainable social and corporate growth. Workshops were also held highlighting the key role played by the Technology and Intellectual Property HQ and the Safety & Environment Office in addressing the key CSR issue of “Contribute to the world through technology.” Active discussion also centered on the TDK Group’s distinctive sustainability strategy to enhance understanding that creating sustainable value is a means of achieving corporate growth.

TDK will continue these in-house educational activities while discussing the establishment of specific goals for applying technology to solve social issues in alignment with relevant business objectives.



Management level workshop



Technology and Intellectual Property HQ lecture

Sustainability | TDK Group's Sustainability

The TDK Group's Value Chain

The Worldwide TDK Group

Since its founding in 1935, the TDK Group has been expanding to countries and regions worldwide. We have a great diversity of suppliers and products. TDK aims to continue supplying products and services that people need in societies across the globe.



(As of March 31, 2019)

The TDK Group's Value Chain

The TDK value chain extending from procurement of raw materials to development, manufacturing, logistics, and sales extends throughout various regions of the world and involves numerous social issues.

Here we present the things we consider for social responsibility in each stage and TDK's initiatives for key CSR issues.



Procurement

TDK procures raw materials from around the world. Consideration for human rights and the environment by suppliers is also a part of TDK's role.

Consideration in CSR

Environment

- Reduce the environmental load

Society

- Supply useful products to customers
- Ensure product quality
- Build good relationships with local communities

- Consideration for human rights and occupational health and safety
- Responsible sourcing of minerals
- Assure stable supply

Governance

- Fair corporate activities
- Comply with laws, regulations, and societal norms
- Ensure information security

Key CSR Issues

Contribute to the world through technology

- Ensure the quality of purchased products

Develop human resources

- Promote global human resource training program
TCDP completions 96 persons

Consider the societal and environmental impact of the supply chain

- Use CSR check sheets and implement CSR audits
CSR-compliant supplier ratio 94.4%
- Conflict minerals survey
Confirmed DRC conflict-free supplier ratio 92.6%

Develop and prosper in harmony with the global environment

- Green procurement





Development

The development process of technology and human resources hold the key to how TDK products can contribute to society and the environment.

Consideration in CSR

Environment

- Reduce the environmental load

Society

- Supply useful products to customers
- Ensure product quality
- Develop human resources
- Consideration for human rights and occupational health and safety
- Build good relationships with local communities

Governance

- Fair corporate activities
- Comply with laws, regulations, and societal norms
- Ensure information security

Key CSR Issues

Contribute to the world through technology

- New product development through sustained research and development Research and development expenditure: 115,155 million yen
- Product assessments
Building of upstream-management-type quality assurance structure

Develop human resources

- Promote global human resource training program
TCDP completions 96 persons
- Technological innovation

Consider the societal and environmental impact of the supply chain

- None

Develop and prosper in harmony with the global environment

- Creation of products contributing to the environment
- Product assessments





Manufacturing

The environment and human resources will be priority areas, including reduction of the environmental load at the time of manufacturing, the eradication of defective products, and labor health and safety.

Consideration in CSR

Environment

- Reduce the environmental load

Society

- Supply useful products to customers
- Ensure product quality
- Build good relationships with local communities

- Consideration for human rights and occupational health and safety
- Ensure stable supply
- Develop human resources

Governance

- Fair corporate activities
- Comply with laws, regulations, and societal norms
- Ensure information security

Key CSR Issues

Contribute to the world through technology

- Manufacturing process capable of reproduction without variation

Develop human resources

- Promote global human resource training program
TCDP completions 96 persons
- Innovative craftsmanship training

Consider the societal and environmental impact of the supply chain

- Implement CSR self-checks and CSR self-audits by third party organizations
- CSR self-checks at manufacturing sites: 100%

Develop and prosper in harmony with the global environment

- Reduce the environmental load of plants
CO₂ emissions from production activities
1,670 thousand t-CO₂





Logistics

The mission of logistics is the stable, reliable, and timely supply of TDK products to customers.

Consideration in CSR

Environment

- Reduce the environmental load

Society

- Ensure product quality
- Ensure stable supply
- Consideration for human rights and occupational health and safety

Governance

- Fair corporate activities
- Comply with laws, regulations, and societal norms
- Ensure information security

Key CSR Issues

Contribute to the world through technology

- Ensure logistics quality

Develop human resources

- Promote global human resource training program
TCDP completions 96 persons

Consider the societal and environmental impact of the supply chain

- None

Develop and prosper in harmony with the global environment

- Reduce the environmental load in logistics





Sales

We seek to maintain high product quality while providing products that satisfy customers through contribution to society and environment issues.

Consideration in CSR

Environment

- Reduce the environmental load

Society

- Supply useful products to customers
- Ensure product quality
- Ensure stable supply
- Consideration for human rights and occupational health and safety
- Responsible sourcing of minerals

Governance

- Fair corporate activities
- Comply with laws, regulations, and societal norms
- Ensure information security

Key CSR Issues

Contribute to the world through technology

- Promote sales of products that solve environmental and social issues
- Customer satisfaction

Develop human resources

- Promote global human resource training program
TCDP competition 96 persons

Consider the societal and environmental impact of the supply chain

- Appropriate responses to CSR surveys and other inquiries from customers

Develop and prosper in harmony with the global environment

- Promote sales of products that contribute to the environment
Reduction of CO₂ emissions through products
2,149 thousand t-CO₂

Contribution to the World through Technology

Basic Policy

Contribute to the world through technology is a key concern for TDK. Toward this end, we are focusing on innovative technology development in our priority markets of automotive, ICT, and industrial & energy, helping to save, store, and reuse energy and solve other pressing issues that modern society is facing. Furthermore, the pursuit of zero-defect product quality based on superior technological competence and realized through a unified production process that extends from the raw materials to the final product will continue unchanged in the future. Providing high quality products and services is our way of striving for the advancement of humankind.

Relevant SDGs



Social Impact (Positive and Negative Impacts)

Positive impact

- Greater technological capabilities
- Technological innovation collaborated with customers
- Contributing to solve societal issues
- Growth of the Group
- Higher quality that meets market changes
- Greater trust from customers and society

Important Theme—Addressing Social Issues by Developing New Kinds of Products the World Has Not Yet Seen

Main efforts

- Strengthening of basic technologies
- Promotion of Kotozukuri(manufacturing excellence)-oriented technological development
- Promote development and sale of first-to-market products

Functions

- Technology HQ
- Each business group

Fiscal 2018 goals	Fiscal 2018 achievements	Fiscal 2019 goals
1) Promote development and sale of first-to-market products	1) The development of first-to-market products by partnering with leading companies and R&D organizations in various regions	1) Carry out activities that aim to open up new business opportunities through technologies and products in different business groups in connection with the SDGs 2) Formulate decision-making processes and procedures that incorporate the viewpoint of sustainability

Related links

[Addressing Social Issues by Developing New Kinds of Products the World Has Not Yet Seen](#)

Important Theme—Pursue Zero-defect Product Quality

Main efforts

- Building of upstream-management-type quality assurance structure
- Innovation of manufacturing processes using IT, robots, etc.
- Continuous improvement of quality management
- Human resource development on a global scale

Functions

- Quality Assurance Function
- Each business group

Fiscal 2018 Goals	Fiscal 2018 Achievements	Fiscal 2019 Goals
1) Number of important claims: 0	1) Fiscal 2018 Achievements	1) Number of important claims: 0

Related links

[Pursue “Zero-Defect Product Quality”](#)

Addressing Social Issues by Developing New Kinds of Products the World Has Not Yet Seen



Contributing to SDGs through Technology and Products

TDK contributes to realization of a happy future society through its technology and products which address six SDGs: Good Health and Well-Being for All (SDG 3), Affordable and Clean Energy (SDG 7), Industry, Innovation, and Infrastructure (SDG 9), Sustainable Cities and Communities (SDG 11), Responsible Consumption and Production (SDG 12), and Climate Action (SDG 13).

These SDGs represent areas in which we feel we can provide maximum value considering the potential of TDK technology and products to contribute toward solutions to social issues facing us today. In our efforts to draw an ideal society where issues are successfully solved, TDK will further develop its technology and products, thereby contributing toward solutions enabling realization of a happy future society.

SDGs	Social issues that TDK addresses	An ideal society
	<ul style="list-style-type: none"> Increasing health and welfare challenges facing an ageing society Sharply increasing medical expenses An increase in people requiring nursing care with the transition to an ageing society Challenges in facilitating active lives and social participation for the disabled 	<ul style="list-style-type: none"> Ensuring universal availability of highly advanced medical technology Maintaining a simple understanding of one's own health A comfortable lifestyle for nursing care patients Supporting independent lives and social participation for the disabled
	<ul style="list-style-type: none"> Climate change from increased fossil fuel usage 	<ul style="list-style-type: none"> Transitioning to renewable energy (Gasoline-powered cars → EV) Use of highly efficient renewable energy

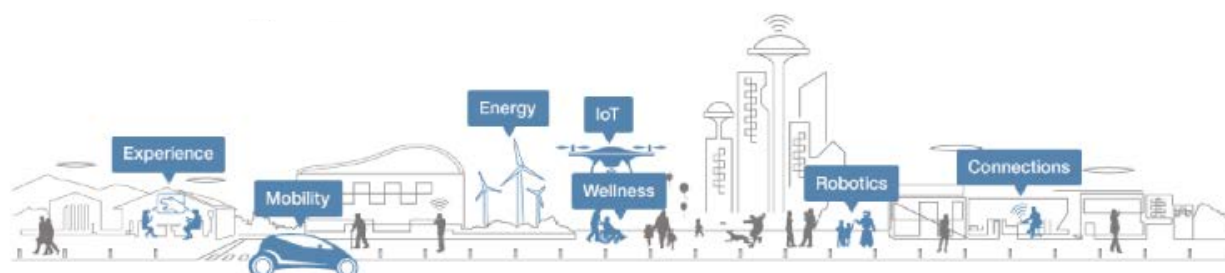
<p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p>	<ul style="list-style-type: none"> • Fragile infrastructure of developing countries • Deteriorating infrastructure of advanced countries • Labor shortage • Explosive increase in amount of information (IoT, autonomous driving, etc.) 	<ul style="list-style-type: none"> • Strengthening the infrastructure base • Recreating a resilient infrastructure • Supplementing the labor shortage; enhanced productivity • Ensuring storage capacity • Realization of high-speed, high-capacity transmission
<p>11 SUSTAINABLE CITIES AND COMMUNITIES</p>	<ul style="list-style-type: none"> • Increasing natural disasters accompanying climate change • Hypoactivity of local regions accompanying urban population concentration • Privacy and leakage of personal information • Traffic accidents 	<ul style="list-style-type: none"> • Minimizing damage • Provision of basic life services without regional favoritism • Ensuring security • Realizing “zero traffic accidents”
<p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p>	<ul style="list-style-type: none"> • Environmental pollution from abandoned electronics • Exhaustion of resources 	<ul style="list-style-type: none"> • Monozukuri (manufacturing excellence) without hazardous materials • Curtailed usage of scarce resources • Resource recycling • A recycle-oriented society • A sharing economy
<p>13 CLIMATE ACTION</p>	<ul style="list-style-type: none"> • Climate change from increased fossil fuel usage 	<ul style="list-style-type: none"> • Transitioning to renewable energy (Gasoline-powered cars → EV) • Use of highly efficient renewable energy • Improved energy usage

Envisioning a Happy Future Society Enabled by TDK’s Distinctive Technology and Products

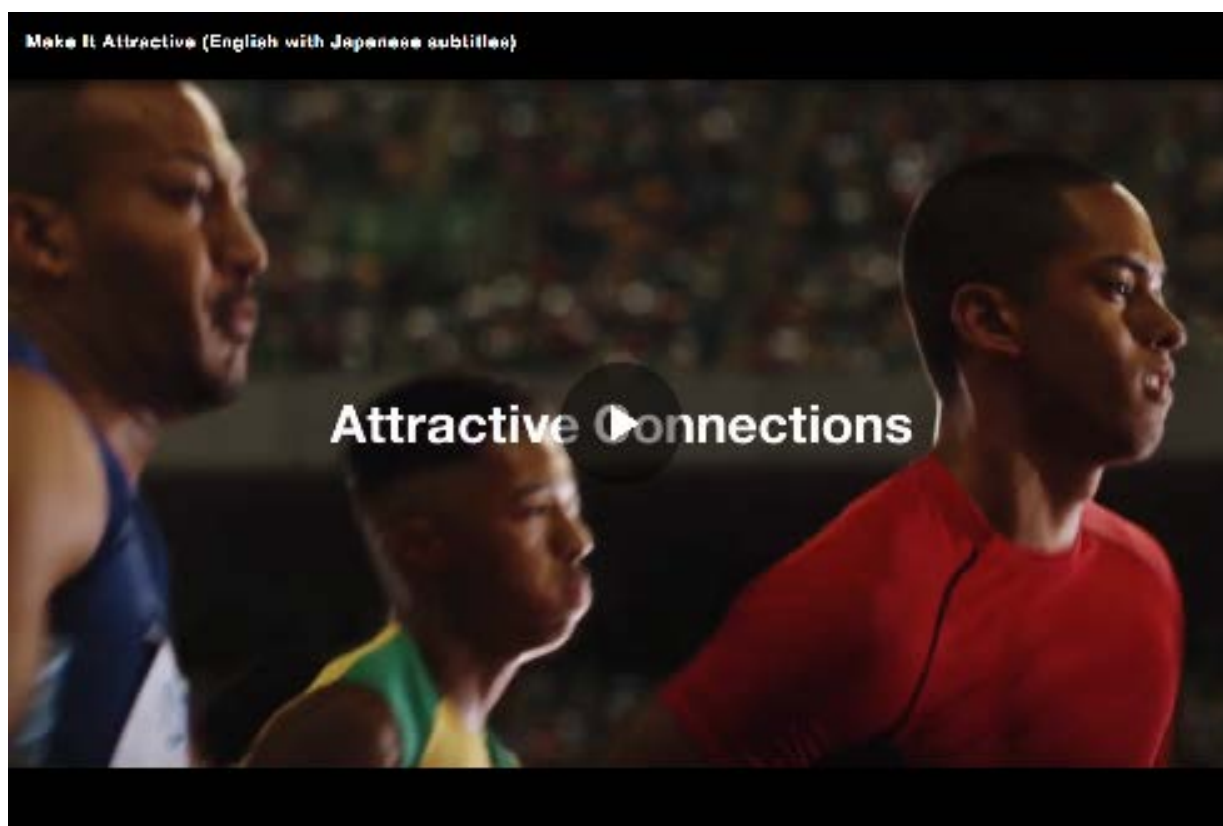
~Make It Attractive~

TDK continues to pursue new potential and challenges in hopes that the application of its unique technology and products will help create a happy future society. This enables realization of Social Value (Aiming for a sustainable society and enterprise), part of TDK’s “Value Creation 2020” Medium-Term Plan and is a shared initiative of the TDK Group companies.

Here we introduce TDK’s distinctive technology and products leveraged in seven markets to provide solutions to social issues. Please enjoy this short movie produced by TDK which presents its vision for a happy future society as well as the sincere intent of TDK developers.



Concept Movie



Attractive IoT

The world's smallest 7-axis sensor, which combines a 6-axis sensor with a pressure sensor, embodies reliable sensing technologies that are not adversely affected even under harsh environmental conditions. These sensors are used in drones that carry out social missions such as transporting medical supplies in conflict regions, stable flight and accurate position information to support these drones performing critical tasks in diverse terrain around the world.



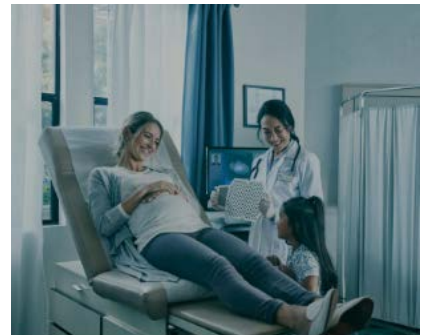
Attractive Mobility

A motion sensor with seven sensors that is just 3 mm square—the industry's smallest. In addition to providing data on acceleration and direction to guide vehicles to their destinations, they can also safely guide vehicles to the side of the road in the event of an emergency. They support autonomous driving technologies and hold substantial potential for the creation of a safe society with no traffic congestion or traffic accidents.



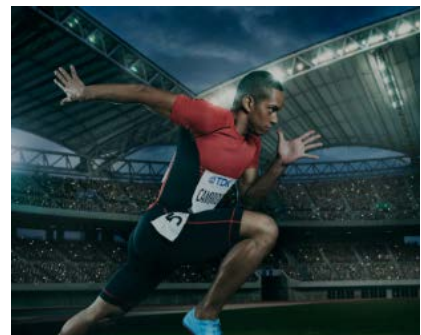
Attractive Wellness

We created a compact biomagnetic sensor by integrating MR element process technologies acquired from magnetic heads with magnetic circuit design technologies. This makes it possible to perform biomagnetic field measurements without the insertion of a device into the body, something that was not possible in the past. These sensors will be used in devices that are more compact and lower cost than earlier products to perform diagnoses that are stress-free for patients.



Attractive Connections

The drama of athletic competition will soon become more exciting than ever. With 5G, viewers will be able to watch multiple broadcasts simultaneously and instantly express their impressions around the world. RF (radio frequency) components with enhanced filtering functions and maximized total performance will simplify handling by customers. We are developing products for all 5G applications such as infrastructure, autonomous driving, and tele-medicine.



Attractive Energy

Capacitors used in lightweight, compact, and high-reliability power electronics facilitate high-efficiency generation and transmission of renewable energy and improve people's quality of life. Looking to the future, we are designing low-inductance capacitors suitable for high-switching frequencies and will contribute to the creation of a sustainable society through clean energy.



Attractive Robotics

The MEMS microphone, which has a tiny membrane that can detect sound, was developed by applying silicone MEMS technology. A robot equipped with the microphone can detect sounds and speakers at long distances, and when multiple microphones are used, a robot can identify where a sound or voice is coming from. Such applications will help hearing-impaired individuals and make it easier to call for help by persons who are unable to act during an emergency.



Attractive Experience

VR and AR applications have enriched experiences in education and brought about significant progress and quality enhancement in learning by children. TDK's ultrasonic sensors can detect a device's orientation, rotation, position, and other information with high precision and determine accurately the movement of a hand in a virtual space. In addition, VR systems that use these sensors are low cost, making it possible for more people to have interactive experiences.



Pursue “Zero-Defect Product Quality”



What is the Arubeki-Sugata (ideal process) that Everyone should Strive for to Realize Zero-Defect Product Quality?

Atsuyuki Nakano

General Manager of Quality Assurance HQ
TDK Corporation

The pursuit of zero-defect product quality extending from raw material procurement to manufacture of the final product forms the basis of TDK’s Monozukuri (manufacturing excellence).

We asked the newly appointed General Manager of the Quality Assurance HQ, Mr. Nakano to tell us about the overall role that Arubeki-Sugata plays in TDK’s Monozukuri, and we also report on how this is put into practice in the model line at the Tsuruoka East Plant of TDK Shonai Corporation.

What zero-defect product quality means

Since 2013, TDK has been intensifying activities aimed at ensuring Arubeki-Sugata within the Monozukuri framework. The aim is to realize a level of quality that makes it possible to manufacture products with zero defects.

In concrete terms, this involves thoroughly reducing waste on the manufacturing site to improve efficiency, and always aiming to deliver the best possible quality to the customer. When defects are eliminated, there is no waste of resources and materials, a fact that has positive repercussions also for society at large, contributing to a reduction in pressure on the environment. This is at the root of TDK’s Monozukuri and Kotozukuri(integrated solutions) concepts.



Rather than having to sort out defective products from the final output of a line, thorough quality management covers the entire process from materials selection to completion of the product.



Devising Arubeki-Sugata solutions with the participation of everyone

Activities aimed at Arubeki-Sugata need to cover all processes, carefully identifying various risks. This requires an understanding not only of one's own area of responsibility but also of the entire process. It therefore is crucial to ensure the participation of all employees in thoroughly examining all the issues. Unless a risk is fully understood, it is not possible to devise proper countermeasures. Four kinds of defects can cause quality problems on the manufacturing floor: design defects, material defects, process defects, and management defects. Together with all on-site staff members, we explored solutions to these issues. During this process, four key elements emerged, namely the presence of an on-site improvement leader, teamwork, daily PDCA, and passion. In other words, the most important factor in achieving zero-defect product quality can be said to be “people.” I believe that TDK’s Arubeki-Sugata represents the ultimate conclusion drawn from an analog type analysis of the way dedicated people perform their work. Without an understanding of what may happen at any given point in a process, merely trying to rely on technologies such as AI and robotics will not result in zero-defect product quality. When the actual people involved in design, technology, and process execution thoroughly engage with an issue, bringing a high level of insight to the table, then we can be sure to make significant progress toward zero-defect product quality.



Our future challenge: preventing problems before they arise

More than five years have passed since we launched the Arubeki-Sugata activities, and we have seen many successful examples. These in turn have contributed to enhanced awareness and ambition in the workplace, creating a virtuous cycle. Recently, even part-time staff can be heard talking about zero defects. This of course makes me very happy, and I see it as my mission to further spread the word and ensure that it leads to definite quality improvements. Also, it is a fact that the customers’ expectations with regard to quality are constantly evolving with the times. For example, electric vehicles are increasingly gaining acceptance, and electronic components make up more than 70 percent of such vehicles, so that customers also have come to regard electronic components as key parts. Because a car carries precious human cargo, our responsibility as the manufacturer of such components is enormous. We must therefore strive toward zero-defect product quality with

all our might. The utilization of robots and AI for the standardization of manufacturing processes will be part of these endeavors. However, it is people who ultimately make this possible. While adopting some of the powerful principles of Industry 4.0, the challenge for the future is to prevent problems before they even begin to happen.

Zero-defect quality begins in the first stage of development

Zero-defect quality must be designed into our products and processes right from the start. It is our responsibility to our customers and to society as a whole that our customers' products and applications function properly and safely for their entire life cycle. Zero-defect quality also means that we manufacture our products without wasting resources, whether we're talking about raw materials, semi-finished and finished goods in our production, energy or water. The result is a highly efficient production process that contributes to sustainability.

In order to achieve zero-defect quality, we need not only an advanced quality management system, but above all well-trained and competent staff. That's why we implemented a compulsory training program for all of our factories at TDK Electronics. We also need perfectly tuned and maintained production equipment. We are improving our manufacturing processes with Industry 4.0 methods by evaluating production data in real time and employing predictive maintenance to eliminate defect risks before they even occur. It is our standard practice to identify and assess such risks during product development. Thus, zero-defect quality begins in the first stage of development.



Dr. Werner Pint
Head of the Technology
Quality Corporate Department,
TDK Electronics AG



A manufacturing floor with a design that reflects Arubeki-Sugata insights

A model line for Arubeki-Sugata

The Tsuruoka East Plant which started production in August 2017 is positioned as a model line facility. Thin-film coil components for automotive use, whose demand is expected to rise further, are manufactured here and become components that are directly connected to life and safety. Zero-defect product quality therefore is crucial both for the customer and for society. A framework covering the four quality aspects of design, material, process, and management has been put in place to achieve this. The Arubeki-Sugata activities at the Tsuruoka East Plant are directed at realizing zero management quality defects. They take the form of “workflow analysis,” “Arubeki-Sugata work procedure/management design,” “identifying design and manufacturing problems and implementing countermeasures,” and “reflecting results in work key points.” In an environment designed to ensure safety and quality, the aim is to create processes where operators are thoroughly familiar with their own process as well as its methods and assessment of its intended results, to the extent that they can explain them fully.



TDK Shonai Corporation Tsuruoka East Plant



Tabulated design and manufacturing problems and countermeasures



10 m long printout of identified issues

Think for yourself, devise improvements, and implement them through team cooperation



Tomomichi Hatakeyama

Tsuruoka East Plant Manager
TDK Shonai Corporation

As a first step, the risks in 392 operations were methodically identified, resulting in a list of 1,702 problems. The Arubeki-Sugata for each problem and risk was then examined and defined, and a manual to convey the information to the manufacturing floor in an easy to understand manner was created. The aim was a concise, memorable format, with slogans such as “no waste, no wobble, no worry.” For example, risks and losses associated with transfer operations were reduced (no waste), standardized work operations and work layouts were defined to eliminate unevenness (no wobble), and work flow lines were designed to enable natural movement without strain (no worry).

QC activities have a particularly important role to play in this undertaking. As Mr. Hatakeyama, Tsuruoka East Plant Manager, puts it, “Think for yourself, devise improvements, and implement them through team cooperation.” A wide range of measures has been implemented to that end. Staff recite the purpose of their own process daily, to foster a clear understanding of the positioning of one's work within the overall process sequence. Tools such as monitors and tablets are used for discussions and to allow checking operations via video at any time by anyone. Special areas created within the work area are set aside for meetings, allowing teams to get together and engage in close communication. “I believe it is only through the steady repetition of diligent actions that zero-defect product quality can be realized.”



Work instruction on site



A recorded video shows operation procedure

A well-trained workforce is the key to zero-defect product quality

Thorough implementation of Arubeki-Sugata activities has resulted in an 80% improvement in workplace-related defect ratio and an increase in productivity by at least 60%. However, as Mr. Hatakeyama points out, “Even with all the effort that went into identifying issues, defects due to common mistakes still occur. Unless defects really shrink to zero, we can’t say that we have achieved our goal. We must diligently repeat the cycle of identifying risks, defining the Arubeki-Sugata of operations and management design, and clarify remaining risks. Trying to reduce risks to the utmost degree is our mission.” And the most important aspect for the realization of this goal is human resources training. “Training of staff opens up the way toward zero-defect product quality. As we move into the future, we must strengthen Japan’s unique Monozukuri power.”



Staff members of the Tsuruoka East Plant

Develop Human Resources

Basic Policy

Our aim at TDK is growth by way of becoming a genuine global company. In this connection, human resources development is considered a cornerstone concept. Along with identifying highly capable human resources and fostering an environment that draws out their individual abilities and potential, we also work to forge a corporate culture that respects the diversity of our human resources and also encourages mutual respect and recognition of efforts between our employees. Shaping a global business environment that attracts truly global personnel to the TDK Group, we at TDK are committed to generating innovative products and services on an ongoing basis and thereby doing our part for society in general.

Relevant SDGs



Social Impact (Positive and Negative Impacts)

Positive impact

- Stimulation of personnel interactions within the Group
- Sources of new creativity and growth
- Progress toward a truly global corporation

Important Theme—Develop Global Human Resources

Main efforts

- Expansion of scope of collecting and comprehending human resource information
- Introduce global selective training
- Establishment of framework for training truly global leaders

Functions

- Human Resource Development Function

Fiscal 2018 goals	Fiscal 2018 achievements	Fiscal 2019 goals
<ol style="list-style-type: none"> 1) Introduce global management development training 2) Adapt global and local development measures in selective regions 3) Global roll out of one comprehensive English test 	<ol style="list-style-type: none"> 1) Successful completion of Territorial Career Development Program (TCDP) in the four territories (Asia, Americas, Greater China, Europe) (~100 persons participate) 2) Alignment between global and local development measures in selective regions 3) English test globally rolled out and global English trainings introduced 	<ol style="list-style-type: none"> 1) Continue Global Management Development Training (TCDP) 2) Introduce newly Global Management Development Training (Advanced Management Program AMP)I 3) Enhance English training program

Related links

[Develop Global Human Resources](#)

[Launched the next generation leader development program within the TDK Group](#)

Important Theme—Cultivate a Corporate Culture that Respects Diversity

Main efforts

- Consideration of expanding the scope and improving the accuracy of human resource attribute information collected in the consolidated management database in order to link it with measures
- Understanding and promotion of diverse cultures through the implementation of global and regional human resource meetings, etc.
- Promotion of the improvement and establishment of workplace environments in each area in which diverse employees can work comfortably

Functions

- Human Resource Development Function

Fiscal 2018 goals	Fiscal 2018 achievements	Fiscal 2019 goals
<ol style="list-style-type: none"> 1) Expand scope and improve accuracy of information in the global talent management system 2) Implement human resources meetings at a global and territorial level 	<ol style="list-style-type: none"> 1) Talent management system extended to the Sales function worldwide and extension to TDK Top Key Positions started 2) Global Human resources meeting with participation of all major legal entities took place in May 2018 Territorial HR meetings with participation of local HR managers launched at all territories 	<ol style="list-style-type: none"> 1) Continue expansion of scope for talent management system 2) Establish a diversity policy 3) Enforce the establishment of a Human Resources network through further organisation of Global and Territorial Human Resources Meetings 4) Start succession planning for identified Top Key Positions at the TDK Group

Related links

[Cultivate a Corporate Culture that Respects Diversity](#)

Develop and Prosper in Harmony with the Global Environment

Basic Policy

As stated in the TDK Environmental Charter, “Develop and Prosper in Harmony with the Global Environment” is one of the TDK Group’s most important business themes. “TDK Environmental Vision 2035” has been established to contribute to developing a sustainable society. Based on this vision, “TDK Environment, Health and Safety Action 2025” has been formulated as a basic action plan for specific steps. The Company also strives to formulate industry standards for gauging product contribution, thereby promoting greater social understanding of the value of its eco-friendly contributions

Relevant SDGs



Social Impact (Positive and Negative Impacts)

Positive impact

- Contributing to the reduction of environmental loads through product supply
- Climate change adaptation and mitigation through business activities
- Improving assessment of amount of product contributions

Negative impact

- Environmental loads generated at group manufacturing sites
- Environmental loads generated through value chain

Important Theme—Reduce Environmental Load throughout Life Cycle Stages

Main efforts

- Understanding of environmental load at each life cycle stages
- Establishment of method for converting each environmental load into CO₂ emissions
- Implementation of activities to reduce environmental load at each life cycle stages

Functions

- Safety and Environment Function

Fiscal 2018 goals

[Please see](#)
[Environmental Goals and Achievements](#)

Fiscal 2018 achievements

[Please see](#)
[Environmental Goals and Achievements](#)

Fiscal 2019 goals

[Please see](#)
[Environmental Goals and Achievements](#)

Related links

[Environmental Activities throughout Life-cycle Perspective](#)

Important Theme—Creating a Framework for Gauging Product Contributions

Main efforts

- Formulation and establishment of common industrial standards
- Dissemination of formulated standards

Functions

- Safety and Environment Function

Fiscal 2018 goals

- 1) Continue to implement standardization and awareness activities in collaboration with industry associations

Fiscal 2018 achievements

- 1) Ongoing activities in collaboration with industry associations and promotion of internal calculations

Fiscal 2019 goals

- 1) Ongoing activities in conjunction with industry groups and continued promotion of efforts to calculate internally

Related links

[Creating a Framework for Gauging Product Contributions](#)

Launched the next generation leader development program within the TDK Group



The TDK Group has grown rapidly through multiple mergers and acquisitions (M&As). Today, only 10% of TDK personnel are now located in Japan and roughly 80% have joined the group through M&As. TCDP (Territorial Career Development Program) was launched in 2018 with the aim to develop the next generation leaders from our diverse employees within the group.

What's TCDP (Territorial Career Development Program)?

TCDP was built on a career development program of the same name which TDK Electronics started in Greater China ten years ago. In 2018, this successful training program was rolled out in Asia, the Americas, and Europe. The TCDP prepares talents from all over the world to become the next generation leaders of TDK. In addition, the TCDP will support global succession planning for key positions and the development of globally-capable leaders who can contribute in various fields.

Through this nine-months program, it is expected the participants selected from each of the four regions to become able to exercise their abilities in diverse fields and cultures. This program aims to deepen the understanding of the basic methods and principles used in management, develop leadership skills, increase employee engagement, and generally improve our management competence. With the TDK group members selected from all over the world, participants take part in the classroom training, group projects and factory visits. It provides opportunities for participants to deepen engagement between employees who rarely communicate with each other in their daily work. It also intends to foster the spirit of One TDK by building solid relations in between the diverse TDK group employees.



Overview

The first round of TCDP in 2018 took place in each of the four regions, Asia, the Americas, Europe and Greater China with a duration of 9 months. The TCDP aims at employees of any function from any location within the TDK group. In the selection process, local site leaders propose candidates. Participants will then be selected from among these candidates by a committee of management representatives in each territory. The program is held in English and consists of five training sessions that take place at different TDK sites in each region, giving participants a chance to get to know as many of the company's business fields as possible. It is the TCDP's unique approach to having a group project activity with a team of 5~6 members, in addition to the classroom training and lecture-style studies. The participants are working together in group projects and have to apply the skills they have learned within the TCDP. At the end of the program, they present the culmination of their efforts to their territorial committee.

FY2018 Schedule (April 2018 - March 2019)

Territory	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Greater China	Zuha-Hongqi	Dalian			Xiaogan		Xiamen		Hong Kong			
Europe	Deutschlandsberg			Szombathely		Karmiel		Paris			Munich	
Asia	Singapore			Ayutthaya		Seoul		Johor Bahru			Tokyo	
Americas	New York			Lincolnshire		San Jose		Gravatai			New York	

Image



From Global HR team

Diversity from over 100,000 group employees is one of strengths of the TDK Group. Uniting the group employees under a common vision can create new value. This initiative will improve dialogue within the group by building closer relationships between employees all over the world, and develop individual abilities in performing daily work. We believe it can lead to enhance the competitiveness of the TDK group.



Carsten Kueck
Head of Training & Development
Global HR Division
Human Resources
HQ
TDK Corporation



Karine Le Heiget
Deputy Head of Training & Development
Global HR Division
Human Resources
HQ
TDK Corporation



Toshinobu Sato
Deputy Head of Training & Development
Global HR Division
Human Resources
HQ
TDK Corporation

Achievement and future plan

The first round of TCDP has been very successful. The participants worked on group projects with topics that outline inspiring ideas and new approaches pointing out opportunities for improvement. For example, members of the TCDP in Asia created a board game in order to enhance cross-functional knowledge. In Europe, participants launched a social pilot project to renovate parts of a migration center. In the Americas and in Europe, two project groups each had the idea to develop a common platform so employees can connect and share knowledge and therefore be able to work more efficiently. Some of the projects could even be implemented meanwhile or already take the next steps in this direction.

The second TCDP round in 2019 have already started, and the high number of applications shows the positive resonance the program is getting by managers as well.

Voice of participants



Daniel Tran Viet Dung
TDK Singapore (Pte) Ltd.

I not only could learn leadership concept in theory, but also applied the knowledge through many interactive sessions in this 3-days training. Besides, the cross-division relationship opens my eyes to a bigger & more complete TDK. It is giving me a unique experience which I strongly believe will benefit my work in both short- and long-term.



Kyung Dae Lee
TDK Electronic Korea Corporation

It was a significant opportunity to meet people from different countries and different work this time. I would like to make an effort to grow myself through this opportunity and I will try to connect to the growth of TDK Group.



Yew Hong Lum
TDK (Malaysia) Sdn. Bhd.

Firstly, before I join the TCDP, I worry the main barrier for us is communication, due to varies country, site, language, function, and background. But, after 4 days, my thought was totally different, we actually communicate very well no matter who you are, what position you belong to, or what is your job scope.



Diogo Gonsalves da Silveira
TDK Electronics do Brasil Ltda.

This first module made it possible to increase self-awareness and realize that we can always learn more about any topic. Leadership is not a tool, it is a skill that must be developed. And now I feel more motivated and focused on building those skills so that I can also help more people develop and contribute to corporate growth.



Thomas Leneke
TDK-Micronas GmbH

At the beginning, we were skeptical, if a training with 25 persons from different cultures, countries and TDK groups can be successful - and it can! The first evening, we already started to talk intensively about private and professional commonalities.



Gayatri Kulkarni
TDK India Private Limited

TCDP has been an essential learning experience. It was interactive and impacted every one of us on our journey of self-exploration. Self-awareness is an important part of who you are and how you can evolve. It is the core of your personal being.

Consider the Societal and Environmental Impact of the Supply Chain

Basic Policy

Consider the Societal and Environmental Impact of the Supply Chain represent extremely important issues for the TDK Group as a midstream company. In light of the latest related laws and ordinances as well as global industrial regulations, as part of our responsibilities as a supplier we take note of the labor environment at TDK Group production sites. Similarly, as a buyer, we ascertain the labor environment conditions of our business partners. We then implement training and guidance as required with a view to improvement. In this way we forge a solid supply chain—from upstream to downstream—to fulfill our social responsibilities.

Related links

[TDK's Supply Chain Responsibility](#)

Relevant SDGs



Social Impact (Positive and Negative Impacts)

Positive impact

- Reduction of risk in own Group
- Continuation of transactions with customers
- Promotion of alternative material development

Negative impact

- Concerns arise of serious human rights violations at sites in Asia where the Group operates
- Concerns arise of serious human rights violations or environmental pollution at sites of group suppliers in Asia
- Concerns arise of complicity in conflict, serious human rights violations, or environmental degradation at sites where minerals are mined through the purchase of metal materials and component materials that contain metal

Important Theme—Consider the Work Environment at Manufacturing Sites

Main efforts

- Implementation of CSR self-checks and risk assessment at all manufacturing sites
- Improvement of activity levels through CSR audits by customers and independent CSR audits
- Continuous improvement of knowledge and abilities through internal auditor training, etc.

Functions

- CSR Function

Fiscal 2018 goals

- 1) Perform 100% CSR self-checks at manufacturing sites
- 2) Perform 100% labor and ethics risk assessment at manufacturing sites
- 3) Secure 100% opportunities for third-party CSR audits once every two years (High-risk countries of Asia including China)

Fiscal 2018 achievements

- 1) Achievement
- 2) Achievement
- 3) Achievement (High-risk countries of Asia including China)

Fiscal 2019 goals

- 1) Perform 100% CSR self-checks at manufacturing sites
- 2) Perform 100% labor and ethics risk assessment at manufacturing sites
- 3) Secure 100% opportunities for third-party CSR audits once every two years (High-risk countries of Asia including China)

Related links

[Efforts as a Supplier \(Consider the work environment at manufacturing sites\)](#)

Important Theme—Consider the Work Environment of Suppliers

Main efforts

- Understanding and promotion of CSR procurement globally
- Improvement of the management level of CSR procurement
- Build a set up to conduct CSR efforts to sub-contractors

Functions

- Procurement Function
- Each business group
- Human Resource Development Function

Fiscal 2018 goals

- 1) CSR-compliant supplier ratio: over 95%
- 2) Build a set up to conduct CSR efforts to sub-contractors
- 3) Perform 100% CSR self-checks at dispatch companies used by manufacturing sites in high-risk countries of Asia including China.

Fiscal 2018 achievements

- 1) CSR-compliant supplier ratio: 94.4%
- 2) Build a set up to conduct CSR efforts to sub-contractors
- 3) Achievement

Fiscal 2019 goals

- 1) CSR-compliant supplier ratio: over 95%
- 2) Perform 100% CSR self-checks at sub-contractors and conduct CSR audits once every two years at major sub-contractor upon whom TDK has high dependence in China
- 3) Perform 100% CSR self-checks at dispatch companies used by manufacturing sites in high-risk countries of Asia including China.

Related links

[Efforts as a Buyer \(Consider the work environment of suppliers\)](#)

Important Theme—Responsible Sourcing of Minerals

Main efforts

- Improvement of confirmed DRC conflict-free supplier ratio
- Continuous participation in and cooperation with industrial organizations and related groups

Functions

- Procurement Function
- Quality Assurance Function

Fiscal 2018 goals

- 1) Confirmed DRC conflict-free supplier ratio: over 90%
- 2) Monitor number of customer responses

Fiscal 2018 achievements

- 1) Confirmed DRC conflict-free supplier ratio: 92.6%
- 2) Implement monitoring

Fiscal 2019 goals

- 1) Confirmed DRC conflict-free supplier ratio: over 92%
- 2) Monitor number of customer responses

Related links

[Responsible Sourcing of Minerals](#)

Sustainability | Environment

Environmental Policy and Environmental Vision

[Environmental Policy \(TDK Environmental Charter\)](#)
[Formulation of the TDK Environmental Vision 2035](#)
[“TDK Environment, Health and Safety Action 2025”
Basic Environmental Action Plan](#)
[Protecting Nature and Biodiversity](#)
[About the Guidelines for Action by the Electrical and Electronics Industries concerning Biodiversity
Conservation](#)

Environmental Policy (TDK Environmental Charter)

TDK has established the TDK Environmental Charter, consisting of the Basic Principle on the Environment and the Basic Policy on the Environment, as our entire group's environment policy, aimed at contributing to the sustainable development of society. In line with the Charter, TDK formulated the Environmental Vision and Environmental Action Plan as a fundamental framework for implementing specific environmental activities.

TDK Environmental Charter

This environmental charter applies to all organizations in the global TDK Group.

Basic Principle on the Environment

The TDK Group recognizes co-existing with the global environment is an important management issue and is committed to realize sustainable growth of the society through the combined efforts of all members in all business operations.

Basic Policy on the Environment

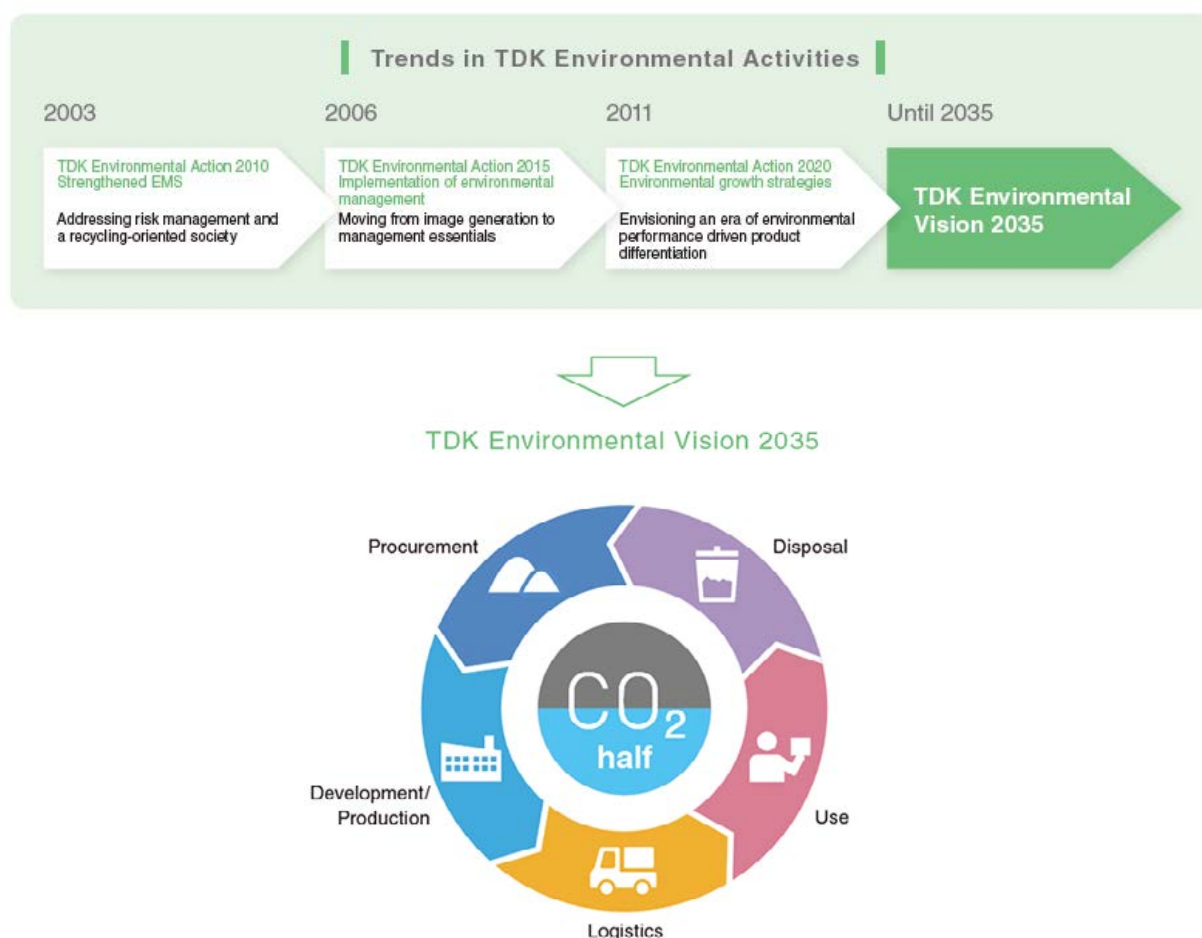
Based on this principle, the TDK Group will lead society by carrying out environmental protection activities quickly and effectively with the consideration for climate change, biodiversity and finiteness of resources to hand over a healthier environment to future generations.

1. Promote activities to realize this policy by the organization with clearly defined responsibility and resources assured by Top Management.
2. Contribute to the society by creating and supplying eco-conscious products in the lifecycle perspective to the market.
3. Conduct eco-conscious production by assessing potential environmental impact from the product designing stage.
4. Comply with national and local environmental laws, regulations and agreements with suppliers and customers, and also correspond to social needs.
5. Act proactively with the consideration for contributions to protect environment and conserve ecosystem through communication and interaction with local society.
6. Improve environmental performance continuously to achieve mid-long term targets and realize the environmental vision.

Established on March, 1st, 1993
Revised on April, 1st, 2018 (5th edition)

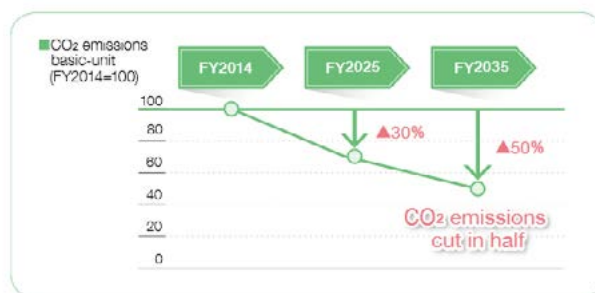
TDK Corporation
President & CEO
Shigenao Ishiguro

Formulation of the TDK Environmental Vision 2035



Revitalizing and Protecting the Global Environment in Preparation for the TDK Centennial Anniversary

The TDK Group achieved its carbon neutral target, originally outlined in our third basic environmental action plan TDK Environmental Action 2020, far ahead of schedule in fiscal 2014. Announced in 2015, prior to the formulation of our next regular environmental vision was Vision 2035, a corporate commitment keyed to the Company's centennial year still two decades away. In Vision 2035, TDK pledge to strive to achieve further innovation and create value for customers through the delivery of outstanding quality products and services, by utilizing the diverse global resources. Based on this corporate motto, TDK will continue to "contribute to culture and industry through creativity", by revitalizing and protecting the global environment and creating a pleasant and safe society. Our Environmental Vision comprises one phase of Vision 2035, we envision business operations under the environmental load within natural circulation. According to this idea, the goal of **"to halve the CO₂ emission basic-unit in a life-cycle perspective by 2035"** has been formulated as "TDK Environmental Vision 2035." This stance stems from the belief that minimizing the environmental load in business activities, and revitalizing the natural environment, is the duty of companies that supply products designed to contribute to its customers and the society. Moreover, modeled on the United Nations Climate Change Conference (COP 21) Paris Agreement, which seeks to curb global warming by achieving a balance between greenhouse gas emissions and absorption sources, this is also considered the ideal corporate posture for all TDK activities.



Expanding Action Spheres from a Lifecycle Perspective

Related link

[Environmental Activities throughout Life-cycle Perspective](#)

“TDK Environment, Health and Safety Action 2025” Basic Environmental Action Plan

Conceived on the cornerstone of TDK Environmental Vision 2035 was a new basic environmental plan extending through year 2025, namely TDK Environment, Health and Safety Action 2025. The action categories and target figures of “TDK Environment, Health and Safety Action 2025” reflect dual consideration for “backcasting” from TDK Environmental Vision 2035, and continuity and “forecasting” from “TDK Environmental Action 2020”. At present, seven action categories have been determined. In the near future, plans call for integrating the environmental loads of these targets through CO₂ conversion, followed by the promotion of action plans targeting the ideal targets enumerated in TDK Environmental Vision 2035.

With regard to safety and health as well, steps will be taken to newly stipulate original action categories and goals, thus moving to realize truly safe and healthy workplace environments.



Related links

[Environmental Goals and Achievements](#)

Protecting Nature and Biodiversity

In order to make its products, TDK uses various metals and oxides as raw materials. These come from mineral ore and other sources mined all over the world. Mining for ore involves the risk of damage to the environment, including landscape damage, clearing of forests, changes in water sources, and possible effects on the ecosystems.

As a manufacturer of components, we cannot simply stop using raw materials, but we can try to mitigate adverse effects. We actively promote not only raw material resource savings by improving production efficiency, we also engage in activities aimed at protecting forest resources, water resources, and more.

All TDK employees are aware of the impact on the environment from production activities. We consider the relationship between business operations and the environment and strive to protect a diverse global environment. The TDK Environmental Charter, revised in April 2018, expressly provides that employees are to consider contributions to ecosystems and take proactive action at all times.

About the Guidelines for Action by the Electrical and Electronics Industries concerning Biodiversity Conservation

In March 2015, the "Environmental Strategy Liaison Committee Biodiversity Working Group" formed by four industry associations in Japan* published the "Guidelines for Action by the Electrical and Electronics Industries concerning Biodiversity Conservation." TDK is fully supporting this initiative and is implementing the guidelines through our activities aimed at protecting biodiversity.

* JEMA: The Japan Electrical Manufacturers' Association

JEITA: Japan Electronics and Information Technology Industries Association

CIAJ: Communications and Information Network Association of Japan

JBMA: Japan Business Machine and Information System Industries Association

Related links

[Guidelines for Action by the Electrical and Electronics Industries concerning Biodiversity Conservation](#)

[Major Nature Protection Activities by TDK \(Social Contribution Activities\)](#)

Sustainability | Environment

Environmental Activities throughout Life-cycle Perspective

[Group-Wide Activities from a Lifecycle Perspective](#)
[Initiatives from a Lifecycle Perspective and the Concept of Environmental Load](#)
[Breakdown of Environmental Load \(CO₂ Emissions\)](#)

Group-Wide Activities from a Lifecycle Perspective

Within TDK Environmental Vision 2035, the declaration is made to reduce the environmental load from a lifecycle perspective. This represents an initiative not limited to measures at the manufacturing stage in factories and the use stage for customers, aspects outlined in the conventional TDK Environmental Action 2020 policy. To expand in this way, we deem it critical for all TDK Group employees to share the same vision and move forward with the same objectives in mind. The “revitalizing and protecting the global environment” expressed in this corporate vision refers to the skillful operation of our business hand in hand with the natural environment. Without that commitment, there will be no sustainable development on the horizon. The entire Group shares an Arubeki-Sugata (ideal process) and undertakes voluntary initiatives in pursuit of that vision.

Initiatives from a Lifecycle Perspective and the Concept of Environmental Load

TDK conducts business on a global scale, and as a result, in order to reduce environmental impact, initiatives are needed that not only reduce our own environmental load but cover the entire value chain, as well.

Presented here are the environmental considerations and main initiatives that TDK views from a lifecycle perspective and an overview of environmental load. Investigations regarding environmental load are being conducted to establish criteria for the TDK Environmental Vision 2035.



Procurement

Environmental considerations

TDK is promoting green procurement and eliminating the use of restricted substances, while also taking measures to reduce suppliers' environmental impact.

Environmental load

7,964,779 t-CO₂*1

Main initiatives

Promoting environmental activities by suppliers

Since fiscal 2018, TDK has conducted surveys of suppliers with a focus on production materials to ascertain with specificity the status of environmental activities and responses to climate change. A survey of suppliers of production materials in Japan was conducted in fiscal 2018, and we plan to expand the survey to China in fiscal 2019.

Development and Manufacturing

Environmental considerations

TDK is promoting environmentally conscious design through product assessments and reducing environmental loads during manufacturing by cutting down on energy and resource use.

Environmental load

1,669,733 t-CO₂*2

Main initiatives

[Please see "Reduce of CO₂ Emissions from Production Activities"](#)

Logistics

Environmental considerations

TDK is working with customers to reduce environmental load on top of enhancing in-house logistical efficiencies.

Environmental load

277,621 t-CO₂*3

Main initiatives

[Please see "Reduce CO₂ Emissions in Logistics"](#)

Use

Environmental considerations

TDK is producing eco-friendly products to help customers reduce their environmental load, while promoting understanding of the value of doing so.

Environmental load

12,521,378 t-CO₂*4

Main initiatives

[Please see "Expand Environmental Contribution of Products"](#)

Disposal

Environmental considerations

TDK is using recyclable materials and designing products for easy disassembly in consideration of the disposal of products at the end of their lifetime.

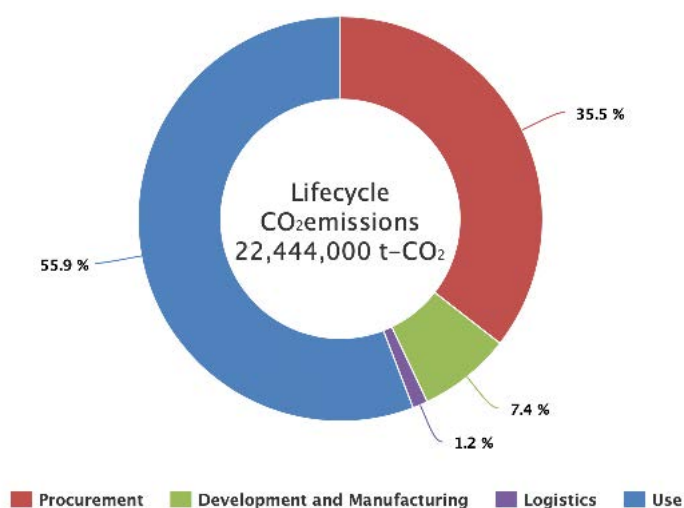
Environmental load

(TDK does not directly dispose of products, so this item does not apply)

Main initiatives

[Please see "Responses to Environment-Conscious Products ECO LOVE](#)

Breakdown of Environmental Load (CO₂Emissions)



*1: Category 1 of Scope 3

*2: Scope 1, Scope 2

*3: Category 4 of Scope 3

*3: Category 11 of Scope 3

Sustainability | Environment

Environmental Goals and Achievements

TDK Environmental, Health and Safety Action 2025—Action Plan

[TDK Environmental, Health and Safety Action 2025—Action Plan \(PDF: 282KB\)](#)

TDK Environmental, Health and Safety Action 2025—FY 2018 Achievements

[TDK Environmental, Health and Safety Action 2025—FY 2018 Achievements \(PDF: 282KB\)](#)

Action Plan 『TDK Environment, Health and Safety Action 2025』

Revised: April 1, 2019

Tasks	FY 2019		FY2021	FY2025
	Goals	Main activities and measures		
[1] TDK Environment Activity: improve CO2 emissions basic-unit in a lifecycle perspective ≥ 30% by 2025, compared with Fiscal Year 2014				
Assess our entire value chain emissions impact including environmental contribution, and improve the sales based basic units				
(1) Reduce CO2 emissions from production activities	・Improve energy origin CO2 emissions basic-unit by 1.8% compared with the previous FY	・implement energy saving activity worth 2.0 % of the previous FY CO2 emissions at each manufacturing site ・Set up the self-motivated target of CO2 emissions ・Determine renewable energy resources ・Penetrate Lower Energy thought during manufacturing ・Promote to determine clean energy purchasing	・Improve energy origin CO2 emissions basic-unit by 8.4% compared with FY2014	Improve CO2 emissions basic-unit by 30%
(2) Expand environmental contribution of products	・Improve product-based CO2 reduction contributions basic-unit by 2.7% compared with the previous FY	・Calculate amounts of product contributions of new products ・Integrate the guidelines for contribution amount calculation intonew products assessment system	・Improve CO2 reduction contributions basic-unit by 21.1%	
(3) Reduce water usage	・Improve water usage basic-unit by 1.5% of the previous FY ・Expand to sites the CO2 calculation for water usage	・Improve water usage basic-unit by 1.5% of the previous FY at each manufacturing site ・Improve the rate of recycle use ・Assess CO2 emissions of water	・Improve CO2 emissions basic-unit of logistics, water and material usage by 15.1% compared with FY2014	
(4) Use resources effectively	・Improve waste basic-unit by 1.5% of the previous FY ・Establish the CO2 conversion method for input materials	・Improve waste basic-unit by 1.5% of the previous FY at each manufacturing site ・Use raw materials effectively ・Promote internal recycle/reuse ・Assess CO2 emissions of input materials		
(5) Reduce CO2 emissions in logistics	・Reduce the amount of CO2 emissions in logistics by 3.0% of FY 2014	・Implement the energy saving activities (e.g. review of delivery center) ・Review the international transportation methods ・Broaden routes calculated CO2 emissions in logistics		
(6) Reduce risks of chemical use	・Reduce influence of chemicals to the human and environment	・Reduce usage or promote the substitution of hazardous chemicals ・Broaden operation sites of "TDK chemical substances control DB"	・Operate the system of "TDK chemical substances control DB" in Japan, China and Asia areas	
(7) Contribute to environmental society	・Preserve the environment and biodiversity	・Promote forest protection activity ・Promote environmental education and awareness ・Assess the CO2 contribution amount of social activities	・Promote forest protection activity ・Promote environmental education and awareness ・Assess the CO2 contribution amount of social activities	
[2] TDK Health and Safety Activity				
Take action toward to achieve "Zero labor accident", our ultimate goal				
Activity for health and safety	・Achieve the "ZERO significant labor accident(※)"	・Mitigate the significant safety risks ・Promote the safety patrol by site top manager thoroughly	・Achieve the "ZERO significant labor accident"	

※significant labor accident: an accident with remaining disability, required long-term nursing, or fatality

FY 2018 Achievements 『TDK Environment, Health and Safety Action 2025』

Tasks	FY 2018		Achievements	Status
	Goals	Main activities and measures		
[1] TDK Environment Activity: improve CO2 emissions basic-unit in a lifecycle perspective ≥ 30% by 2025, compared with Fiscal Year 2014				
Assess our entire value chain emissions impact including environmental contribution, and improve the sales based basic units				
(1) Reduce CO2 emissions from production activities	・Improve energy origin CO2 emissions basic-unit by 1.7% compared with the previous FY	・implement energy saving activity worth 2.0 % of the previous FY CO2 emissions at each manufacturing site ・Set up the self-motivated target of CO2 emissions ・Determine renewable energy resources	・Improved by 6.7% compared with the previous FY	Achieved
(2) Expand environmental contribution of products	・Improve product-based CO2 reduction contributions basic-unit by 2.7% compared with the previous FY	・Calculate amounts of product contributions of new products ・Integrate the guidelines for contribution amount calculation intonew products assessment system	・Worsened by 3.1% compared with the previous FY	Not achieved
(3) Reduce water usage	・Improve water usage basic-unit by 1.4% of the previous FY ・Establish the CO2 conversion method for water usage	・Improve water usage basic-unit by 1.4% of the previous FY at each ・Improve the rate of recycle use ・Assess CO2 emissions of water	・Improved by 9.3% compared with the previous FY ・Investigation of methods for calculating CO2 is ongoing	Achieved Not achieved
(4) Use resources effectively	・Improve waste basic-unit by 1.4% of the previous FY ・Establish the CO2 conversion method for input materials	・Improve waste basic-unit by 1.4% of the previous FY at each manufacturing site ・Use raw materials effectively ・Promote internal recycle/reuse ・Assess CO2 emissions of input materials	・Improved by 8.2% compared with the previous FY ・Implemented Scope 3 calculations	Achieved Achieved
(5) Reduce CO2 emissions in logistics	・Reduce the amount of CO2 emissions in logistics by 3.0% of FY 2014	・Implement the energy saving activities (e.g. review of delivery center) ・Review the international transportation methods ・Broaden routes calculated CO2 emissions in logistics	・Reduced by 3.2% compared with FY2014	Achieved
(6) Reduce risks of chemical use	・Reduce influence of chemicals to the human and environment	・Reduce usage or promote the substitution of hazardous chemicals ・Broaden operation sites of "TDK chemical substances control DB"	・Operate the system of "TDK chemical substances control DB" in Japan, China and Asia areas	Achieved
(7) Contribute to environmental society	・Preserve the environment and biodiversity	・Promote forest protection activity ・Promote environmental education and awareness activity ・Assess the CO2 contribution amount of social activities	・No. of trees planted outside company: 1,466 ・Aggregate no. of employees participating in volunteer activities: 3,046	Achieved
[2] TDK Health and Safety Activity				
Take action toward to achieve "Zero labor accident", our ultimate goal				
Activity for health and safety	・Achieve the "ZERO significant labor accident(※)"	・Mitigate the significant safety risks ・Promote the safety patrol by site top manager thoroughly	・Achieve "Zero significant labor accidents"	Achieved

※significant labor accident: an accident with remaining disability, required long-term nursing, or fatality

Sustainability | Environment

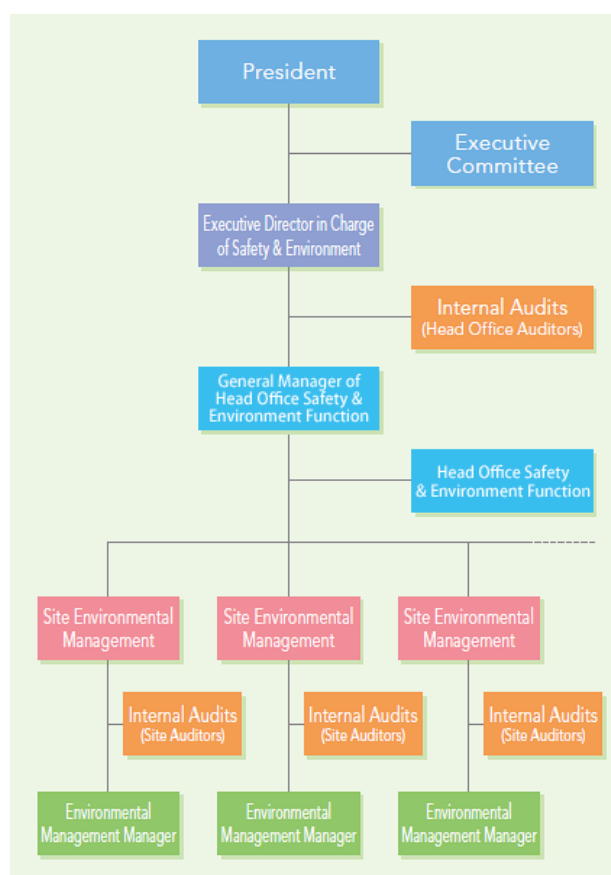
Environmental Management System

Environmental Management System	Operation of the TDK Environmental Management System
EMS Assessment System and Award Program	Environmental Risk Management at Plants
Prevention and control of exposure to toxic substances with products as the source	

Environmental Management System

TDK has established a platform for environmental action based on the Environmental Management System (EMS) concept, with the CEO at the top.

The platform is designed to comprehensively address environmental issues that are becoming ever more complex and globalized. It goes beyond the approach focusing on single sites, allowing us to respond promptly and effectively while remaining aware of the big picture.



Operation of the TDK Environmental Management System

All manufacturing sites of TDK have obtained ISO14001* certification, and TDK is proceeding with the integration of the Environmental Management System in Japan, China, and North America.

In addition, environment conferences were held in a number of locations including Japan, China, the ASEAN region, Europe, and America. These are aimed at promoting local activities tailored to the situation in the respective region, while remaining oriented towards achieving the overall goals laid down in the TDK Environment, Health and Safety Action 2025.

* ISO14001: International standard (IS) regulating EMS compliance

Related links

[Facilities with ISO 14001 and OHSAS 18001 \(ISO45001\) Certification](#)

EMS Assessment System and Award Program

With the aim of boosting the Environmental Management System and the performance of safety and environment related activities, TDK is introducing a program for assessing the degree by which both safety and environment management related goals have been attained on a global basis.

The program covers five areas, namely energy, water, waste, safety/health, and social contributions. Business sites with a high overall score, and sites or departments that have conducted special activities in a specific area are recognized with an award. Award recipients in fiscal 2018 were as follows:

■ Excellent overall score

Japan region	Kitakami Plant, TDK Akita Corporation
China region	TDK Taiwan Corporation

■ Outstanding activities in a specific field

Iida Plant, TDK Shonai Corporation	The entire plant worked together under the leadership of top management to undertake organizational safety and environmental activities. There have been no occupational accidents for 15 consecutive years.
Amperex Technology Ltd.	Selecting topics and making improvements through small group activities made significant contributions to reducing energy usage. Compared with the previous year: reduction of 3.4%.
Magnecomp Precision Technology Public Co., Ltd.	High-level responses were made to the Responsible Business Alliance (RBA) survey in supply chain management.
TDK Philippines Corporation	Best practices for energy conservation at the company's plant were implemented at other plants and guidance was provided, contributing to raising the level of safety and environmental activities in the Asia region.

TDK-Lambda UK Ltd.	Efforts were made to calculate the site's own Scope 3 CO ₂ emissions. In addition, renewable energy was introduced by using photovoltaic power.
TDK Electronics AG	The purchase of clean energy at European sites was promoted.
TDK Ferrites Corporation	Efficient operation of plants and in-process facilities was implemented, making large contributions in energy, water, and waste basic-unit compared with the previous year.

Environmental Risk Management at Plants

Managing soil contamination and VOC risks

TDK has established environmental risk assessment standards and management methods for soil contamination and VOCs,* and each site regularly conducts risk assessment. At high risk locations, a clearly defined priority sequence of preventive measures, restoration measures etc. ensures effective management of environmental risks.

* VOC: Volatile Organic Compounds

Pollution prevention regulatory compliance and accidents

To prevent the contamination of atmosphere, water, soil, etc., TDK strictly complies with all relevant laws and regulations. For certain items, we have even set voluntary standards that are more stringent than the legal requirements, and we take preventive action whenever necessary to reduce the environmental load.

In fiscal 2018 there were no statutory level excesses or accidents.

Prevention and control of exposure to toxic substances with products as the source

Related links

[Quality Assurance Activities](#)

Sustainability | Environment

Creating a Framework for Gauging Product Contributions

Efforts at TDK

Expand reduction of CO₂ emissions through products (product contributions) is one of the core initiatives within TDK Environmental Vision 2035 and Environment, Health and Safety Action 2025. To mount potent appeals for the social contributions by TDK products as the fruits of technical initiatives, these product contributions have been calculated and disclosed from TDK Environmental Action 2020 (the Company's previous medium- to long-term plan). Public awareness activities are also being advanced to gain understanding of the contributions of electronic components as intermediary parts, along with moves to formulate coherent industry standards for calculation methods positioned to serve as the basis for earning appropriate evaluations of product contributions performance, and the results were released in the form of guidance.

Based on these results, TDK established the Guideline for Calculation of Product Contributions, supplemented the assessment requirements during the product development stage by adding calculation of product contributions and is promoting the spread of calculation work throughout the Group.

In fiscal 2018, rules for calculating the degree of product contribution were established in conjunction with the miniaturization of capacitor products for automotive use.

TDK will continue development calculation rules and will make efforts to expand and spread their use throughout the Group.

Sustainability | Environment

Reduce of CO₂ Emissions from Production Activities

[Background of Goals](#)
[Fiscal 2018 Goals and Achievements](#)
[Future Activities](#)
[Concrete Activities](#)

Background of Goals

The human-caused emission of greenhouse gases, which is thought to be one of the causes of global warming, continues to increase. As shown, for example, by the Paris Agreement, which was adopted at the 21st Conference of the Parties to the UN Framework Convention on Climate Change (COP 21) in December 2015, there is a growing sense of crisis concerning climate change. In particular, carbon dioxide (CO₂) accounts for 76% of greenhouse gases and is a main source of emissions.* Therefore, it is necessary to implement a steady reduction of emissions in industrial activities.

In the TDK Environmental Vision 2035, TDK addresses the issue of reducing the environmental load from the perspective of the entire lifecycle, from the use of raw materials to the use and discarding of products. Within this process, we realize that energy origin CO₂ emissions at production sites are a principal cause of environmental load, and we are taking steps to reduce them.

* From the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC)

Fiscal 2018 Goals and Achievements

Goal

- Improve energy origin CO₂ emissions basic-unit by 1.7% compared with the previous FY

Achievement

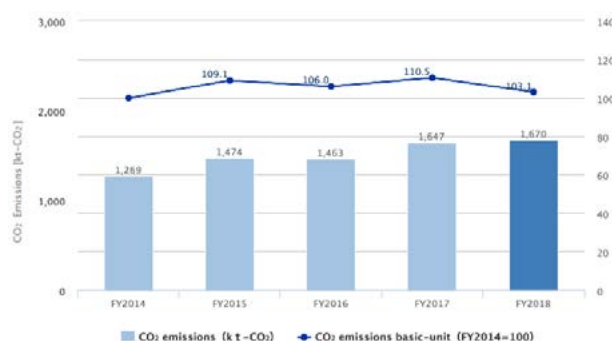
- Improved by 6.7% compared with the previous FY

Main activities and measures

- implement energy saving activity worth 2.0 % of the previous FY CO₂ emissions at each manufacturing site
- Set up the self-motivated target of CO₂ emissions
- Determine renewable energy resources

CO₂ emissions at production sites in fiscal 2018 amounted to 1.670 million tons, up 1.4% from the previous FY. In addition, CO₂ emissions per unit of consolidated sales improved by 6.7% compared with the previous FY. Thus, our goal was achieved.

Trends in CO₂ emissions from production activities (global)*1

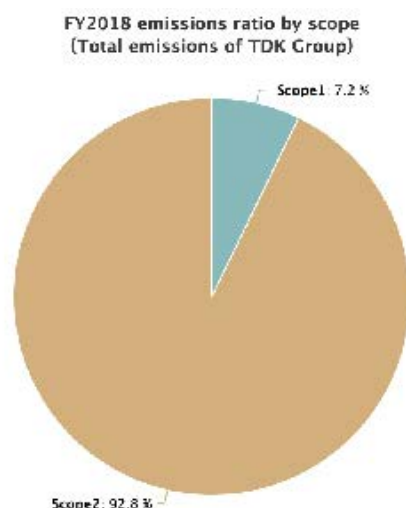
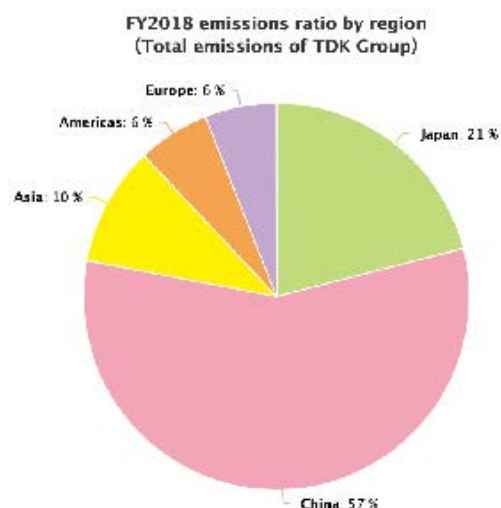


*1 Measurement and calculation methods and fiscal 2018 results have been verified by third parties.

Related links

[Third-Party Review of Environmental Performance Data](#)

[Third-Party Verification](#)



* Scope:

An international category for measuring greenhouse gas (GHG) emissions defined by the Greenhouse Gas Protocol.

Scope 1 is defined as direct emissions from facilities that are owned or controlled by the organization, and Scope 2 as emissions from the generation of energy consumed by facilities that are owned or controlled by the organization.

* TDK's standards for CO₂ emissions conversion

- Figures for the energy used by each facility are calculated by multiplying the volume of purchased electricity and fuel (such as gas and oil) by a CO₂ conversion factor.
- The CO₂ conversion factor for fuel is as stipulated in the Law Concerning the Promotion of Measures to Cope with Global Warming. The CO₂ conversion factor for purchased electricity is the latest factor published at the outset of the term when establishing the plan. (For Japan: Emission coefficient by electric power company based on the Act Concerning the Promotion of Measures to Cope with Global Warming; Overseas: coefficient used by GHG protocol for each country, eGRID coefficient for USA; coefficient from the Bureau of Energy, Ministry of Economic Affairs of Taiwan for Taiwan)

Future Activities

TDK will promote activities more closely associated with production activities through manufacturing reform tied to the Industry 4.0 and TDK's own pursue zero-defect product quality.

Concrete Activities

Rationalization of production energy by specialized energy-saving teams

Energy-saving measures have mainly been implemented on the plant level in the past, but an energy-saving team comprising energy managers responsible for multiple factories and a headquarter energy manager was established and has been implementing energy-saving measures to undertake companywide initiatives.

In fiscal 2018, the energy-saving team conducted an energy audit of the Honjo Plant West Site, a plant with high energy consumption levels, investigated measures, and made proposals for energy-saving measures that can reduce energy consumption by the factory as a whole by more than 2%.

Similar teams will be established at overseas factories and global measures will be taken.



The energy-saving team conducts a plant energy audit to propose energy-saving measures

Introduction of renewable energy

TDK Electronics AG switched 100% of its electricity purchases to electricity generated from renewable energy at two sites in Europe.

Sustainability | Environment

Expand Environmental Contribution of Products

[Background of Goals](#)
[Fiscal 2018 Goals and Achievements](#)
[Future Activities](#)
[Concrete Activities](#)

Background of Goals

In 1997 TDK introduced product assessment to evaluate the environmental impact of products throughout their whole lifecycle. Only products that receive certification in this product assessment screening are commercialized and distributed in the market. Furthermore, as a measure designed to continuously create products with high environment-conscious effects, in 2008 TDK introduced a system whereby products that are deemed on the basis of the product assessment results to be excellent environment-considerate products are designated as ECO LOVE products. TDK discloses information about these ECO LOVE products on its website. Its target was for such products to account for 30% of sales in fiscal 2011, double the figure of 15% in fiscal 2009.* By achieving this target, TDK promoted the creation and diffusion of products contributing to a reduction of the environmental load. In addition to these existing activities, TDK focuses on the contribution of products and know-how to the reduction of CO₂ emissions in society. TDK is in the process of establishing computing criteria for quantifying this environmental contribution in fiscal 2011, and in fiscal 2015, we formulated a set of guidelines for calculation of product contributions that reflect the results of our compilation efforts. By means of continued product assessment activities, we are aiming to promote the reduction of CO₂ emissions through products.

* Sales ratio excluding head and battery products

Related link

[Environment-Conscious Products ECO LOVE](#)

Fiscal 2018 Goals and Achievements

Goal

- Improve product-based CO₂ reduction contributions basic-unit by 2.7% compared with the previous FY

Achievement

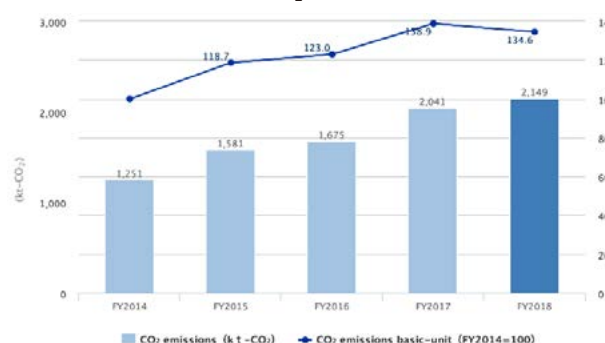
- Worsened by 3.1% compared with the previous FY

Main activities and measures

- Calculate amounts of product contributions of new products
- Integrate the guidelines for contribution amount calculation into new products assessment system

Product-based CO₂ reduction contributions in fiscal 2018 amounted to 2.149 million tons, up 5.2% from the previous FY, and CO₂ reduction contributions basic-unit worsened by 3.1% compared with the previous FY. Thus, our goal was not achieved

Trend in the reduction of CO₂ emissions through products*1,2



*1 A third party review of the calculation method was performed

Related link

[Third-Party Review of Environmental Performance Data](#)

*2 TDK calculates product contributions based on in-house guidelines conforming with the “TR62716 Guidance on quantifying greenhouse gas emission reductions from the baseline for electrical and electronic products and systems” of the International Electrotechnical Commission (IEC), the “Guidelines for the Calculation of Contributions to the Reduction of Greenhouse Gas Emissions” of the Institute of Life Cycle Assessment, Japan, and the “Guidance on the GHG Emission Reduction Contributions of Electronic Products” of the Japan Electronics and Information Technology Industries Association (JEITA).

Environmental contributions of TDK products (by category)

Automobiles (incl. HEV and EV)

207,000 t-CO₂
(223,000 t-CO₂)



Industrial equipment

1,115,000 t-CO₂
(972,000 t-CO₂)



ICT

276,000 t-CO₂
(320,000 t-CO₂)



General electrical appliances

551,000 t-CO₂
(526,000 t-CO₂)



(): FY 2018 Results

Future Activities

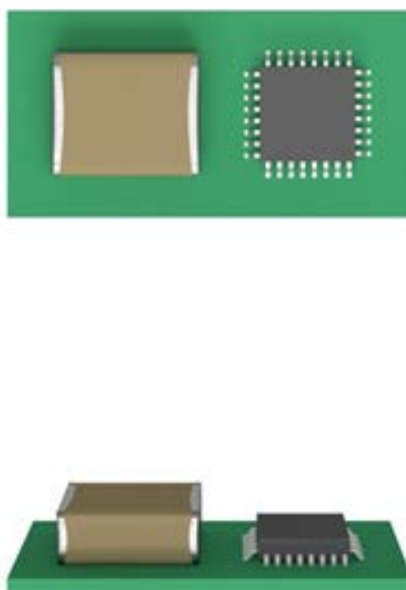
We will strive to develop environment-contribution products that contribute to reducing impact on the environments of customers and society and will expand the spread of our products by emphasizing their value.

Concrete Activities

Automotive MLCCs contribute to reducing environmental load

TDK has miniaturized and increased the capacity of multilayer ceramic chip capacitors (MLCCs) through adoption of ultra-fine structures made possible by advanced materials technologies and advanced layering technologies that enable the production of 1,000 layers. As a result, MLCCs are used in many common products such as automobiles, consumer electronics, and information and communications devices.

As a result of miniaturization of products used in automobiles, the environmental contribution of MLCCs is equal to 19,162 tons when converted to CO₂. We expect that this contribution will increase even further as environmentally friendly vehicles are used more widely.



Sustainability | Environment

Reduce Water Usage

[Background of Goals](#)
[Fiscal 2018 Goals and Achievements](#)
[Future Activities](#)
[Concrete Activities](#)

Background of Goals

Usable water resources on the planet are limited. In view of the expected future rise in water use due to economic growth and population increases in developing countries, the availability of water has been cited as a global risk. In response to this trend, TDK set a target for reducing the volume of water used in production activities and is striving to gauge the water risk.

Fiscal 2018 Goals and Achievements

Goal

- Improve water usage basic-unit by 1.4% of the previous FY
- Establish the CO₂ conversion method for water usage

Achievement

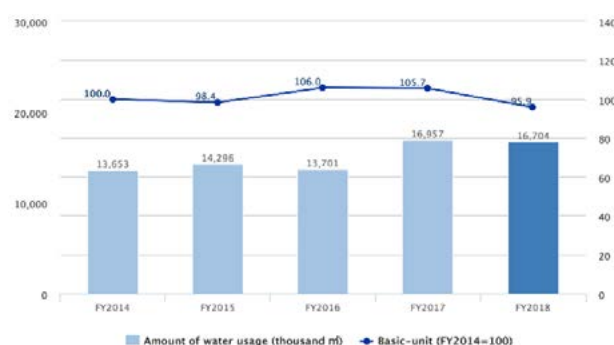
- Improved by 9.3% compared with the previous FY
- Investigation of methods for calculating CO₂ is ongoing

Main activities and measures

- Improve water usage basic-unit by 1.4% of the previous FY at each manufacturing site
- Improve the rate of recycle use
- Assess CO₂ emissions of water

The total amount of water usage in FY2018 reduced by 1.5% compared to the previous FY to 16,704,000 m³ and water usage basic-unit improved by 9.3% compared with the previous FY. Thus, our goal was achieved.

Trend of amount water usage (global)



Future Activities

TDK will conduct water risks surveys in each country and region, consider the establishment of water risk indicators in site catchment areas, and in particular endeavor to promote the reduction of water use in water-shortage regions.

Concrete Activities

- Cyclic usage of cooling water
- Reuse of pure water from used vacuum pumps in cooling towers
- Use of rainwater as toilet cleansing water, etc.
- Collection of fallen snow and use as aid for cold energy recovery apparatus
- Use of recycled water in production processes
- Reuse of water through the introduction of sand filters

Sustainability | Environment

Use Resources Effectively

[Background of Goals](#)
[Fiscal 2018 Goals and Achievements](#)
[Future Activities](#)
[Concrete Activities](#)

Background of Goals

Amid the call for the effective use of limited resources and contributions to a recycle-oriented society, TDK achieved its zero-emissions target by fiscal 2006 and since then has been making efforts to maintain this level. Furthermore, from the perspective of the effective use of resources, TDK is promoting efforts to control the occurrence of industrial waste itself.

Fiscal 2018 Goals and Achievements

Goal

- Improve waste basic-unit by 1.4% of the previous FY
- Establish the CO₂ conversion method for input materials

Achievement

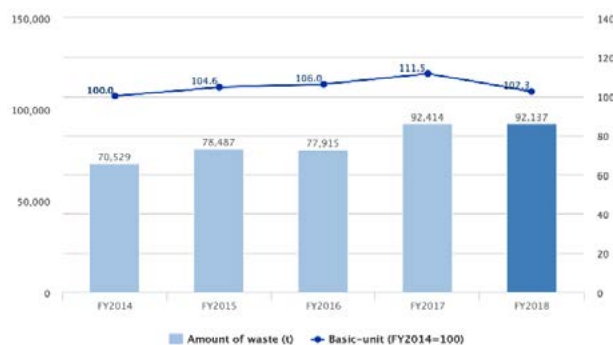
- Improved by 8.2% compared with the previous FY
- Implemented Scope 3 calculations

Main activities and measures

- Improve waste basic-unit by 1.4% of the previous FY at each manufacturing site
- Use raw materials effectively
- Promote internal recycle/reuse
- Assess CO₂ emissions of input materials

The total amount of waste generated in FY2018 reduced by 0.3% compared with the previous FY to 92,137 tons and waste basic-unit improved by 8.2% compared with the previous FY. Thus, our goal was achieved.

Trend of amount of waste (global)



Future Activities

TDK will promote thorough process improvement and, from the perspectives of both input resource efficiency and yield improvement rate, make efforts to restrain waste discharge.

Concrete Activities

- Reduction of number of plating processes, materials purchased, and waste generated by changing substrate plating electrode film patterns
- Increase in the lifespan of plating solution through measures to prevent contamination by foreign material
- Reduction of amount of input resources through process improvement
- Reduction of amount of waste by improving input resource efficiency
- Reduction of amount of wastewater and sludge by changing choice of coagulant

Sustainability | Environment

Reduce CO₂ Emissions in Logistics

[Background of Goals](#)
[Fiscal 2018 Goals and Achievements](#)
[Future Activities](#)
[Concrete Activities](#)

Background of Goals

TDK is tackling the reduction of CO₂ emissions in logistics with the aims of contributing to the control of global warming, improving transportation efficiency, and reducing transportation costs.

In Japan, TDK set up a committee to improve energy conservation in distribution in fiscal 2006, when the revised Energy Conservation Act went into effect, and is making efforts to reduce logistics-related energy.

Fiscal 2018 Goals and Achievements

Goal

- Reduce the amount of CO₂ emissions in logistics by 3.0% of FY 2014

Achievement

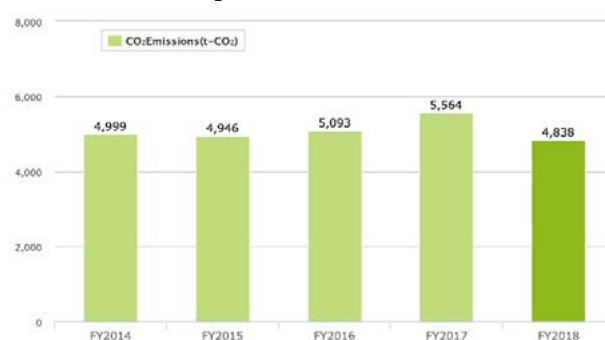
- Reduced by 3.2% compared with FY2014

Main activities and measures

- Implement the energy saving activities (e.g. review of delivery center)
- Review the international transportation methods
- Broaden routes calculated CO₂ emissions in logistics

CO₂ emissions in logistics in FY2018 reduced by 13.0% compared to the previous FY to 4,838 tons and reduced by 3.2% compared with FY2014. Thus, the goal was achieved.

Trend of CO₂ Emissions in logistics (Japan)



* Calculated in accordance with Japan's Energy Saving Act

Future Activities

TDK will expand its survey of CO₂ emissions in logistics to overseas sites and endeavor to promote their reduction in the TDK Group as a whole.

Concrete Activities

- Modal shift
- Better efficiency of inter-plant transportation through the concentration of production sites

Sustainability | Environment

Reduce Risks of Chemical Use

[Background of Goals](#)
[Fiscal 2018 Goals and Achievements](#)
[Future Activities](#)
[Concrete Activities](#)

Background of Goals

TDK is promoting reduction of the use and discharge of chemical substances in order to curtail environmental impact as well as health risks to employees and the risks of fire and explosion.

Fiscal 2018 Goals and Achievements

Goal

- Reduce influence of chemicals to the human and environment

Achievement

- Operate the system of "TDK chemical substances control DB" in Japan, China and Asia areas

Main activities and measures

- Reduce usage or promote the substitution of hazardous chemicals
- Broaden operation sites of "TDK chemical substances control DB"

Future Activities

TDK will promote the unified management of chemical substances on a global scale with the aim of improving safety in the handling of harmful and dangerous chemical substances in conformity with national laws, etc.

Concrete Activities

- In order to promote the elimination and replacement of harmful chemical substances and highly flammable substances, we conducted global management using the "TDK chemical substances control DB". Starting in 2018, we updated the approval request database and created an English version and commenced operations at sites in Japan.

Sustainability | Society

Respect for Human Rights

[Our Approach](#)
[Due Diligence](#)
[Major Initiatives Related to Human Rights](#)
[Training](#)

Our Approach

The TDK Code of Conduct (Charter of Corporate Behavior) states that “The TDK Group will continue to respect human rights, comply with relevant laws and regulations and international rules, and discharge its social responsibility with a strong sense of ethical values for the purpose of creating a sustainable society.”

Since the UN Human Rights Council adopted the “protect, respect, and remedy” framework, known as the Ruggie Framework, with regard to business and human rights in 2008, a series of international CSR guidelines and UN and EU policies have been introduced in accordance with the framework, and several jurisdictions around the world have enacted laws addressing human rights in the context of international business. Specifically, these include the conflict minerals clause in the US Dodd-Frank Wall Street Reform and Consumer Protection Act enacted in 2010, the Transparency in Supply Chains Act enacted in the US state of California in 2010, the UN Guiding Principles on Business and Human Rights in 2011, the Modern Slavery Act in the United Kingdom in 2015, and EU regulation on conflict minerals in 2017. This trend represents a strong appeal to companies to specifically identify human rights issues in their business activities and take appropriate action.

The TDK Group Policy on Human Rights was formulated in 2016. TDK promotes the correct understanding, awareness, and improvement of human rights issues, including social issues, not only in business activities within the Group itself but also in the value chain.

Related Links

[TDK Code of Conduct](#)
[TDK Group Policy on Human Rights](#)
[TDK Group - Human Rights Statement](#)
[The TDK Group's Value Chain](#)

Due Diligence

Communication with external parties

We continue to strive to identify and engage with human rights issues by acquiring information from many sources.

- 2017
Invited two outside experts to attend a study session on the role required of TDK in response to human rights in the supply chain.
- 2015
Invited Mr. Masaki Wada of Energetic Green for an exchange of opinions concerning what is expected of TDK to promote CSR in the supply chain.
- 2014
Engaged in a dialogue with experts to identify human rights issues relevant to TDK.

- 2013

Participated in the Human Rights Due Diligence Workshop, organized by the Caux Round Table Japan. We contributed to identifying human rights issues related to the manufacturing sector, while sharing expertise with members from nine other companies, NGOs, and experts (10 associations).

Related links

[2017 Targeting Human Rights Responses at the Supply Chain](#)

[2015 CSR Promotion in the Supply Chain](#)

[2014 Identification of Human Rights Issues through Dialogue with Stakeholders](#)

[2013 Human Rights Due Diligence Workshop \(Caux Round Table Japan\)](#)

Group internal initiatives

TDK implements annual CSR self-assessments and labor and human rights/corporate ethics related risk assessments based on the Responsible Business Alliance (RBA) Code of Conduct at all Group manufacturing sites. These are supervised by TDK's CSR Headquarters Group. In addition, every two years, we conduct CSR self-audits in manufacturing sites located in China and the high-risk countries of Asia, using third-party auditing companies, including customer CSR audits.

In fiscal 2018, TDK implemented CSR self-assessments at all of its 81 manufacturing sites. Among 34 targeted sites in China and Asia, independent third-party CSR audits were conducted at five sites that had not undergone customer CSR audits over the last two years.

Labor Dispatch Company Oriented Initiatives

The high-risk countries of Asia including China, where human rights and recruitment risks are considered to be high, improper management practices by labor dispatch companies are frequently discovered.

In fiscal 2018, we conducted CSR self-assessments that included labor dispatch companies used by manufacturing sites in the high-risk countries of Asia including China.

Supplier oriented initiatives

In order to promote CSR procurement, TDK implements annual CSR self-assessments of its suppliers on the basis of items required by the RBA. Furthermore, TDK has been conducting CSR audits of its suppliers, selecting targeted suppliers in consideration of their importance in the delivery of products to customers and our reliance on them.

In fiscal 2018, CSR self-assessments confirmed that 94.4% of suppliers of our Group companies were CSR compliant, an 3.2% improvement over fiscal 2017. We will continue to strengthen our efforts with regard to Group companies and suppliers.

Major Initiatives Related to Human Rights

Prohibition of child labor and forced labor

The TDK Code of Conduct strictly prohibits child labor and forced labor* and demands the same commitment from suppliers. For example, at our manufacturing sites in China, we adhere to strict age check procedures to prevent any use of child labor and implement monitoring by headquarters, including of contract manufacturers. In fiscal 2018, no case of child labor was discovered.

* Forced labor refers to situations in which persons are coerced to work through the use of intimidation and the threat of punishment. (Example: Labor performed under the conditions of "savings" being forcibly deducted from a person's salary or debts being accumulated, or exorbitant fees or deposit money being imposed, etc.)

Protection of foreign workers

Foreign workers are susceptible to becoming victims of forced labor and human trafficking, due to their low social and economic position, especially non-skilled workers. Measures are being implemented to protect the human rights of and provide relief to such individuals. In Malaysia, the problem of forced labor involving foreign workers became a social issue. In fiscal 2013, we began to assess the problem, and have since then devised and implemented countermeasures based on the results. We will continue our efforts to monitor and correct any instances of forced labor through our supply chain.

Working hours and fair wage management

We use dedicated labor management systems at each of our sites and pay wages based on appropriate work performance management. In China, where extended continuous working hours of employees have become a problem, we began in 2015 to strengthen the monitoring of production sites by headquarters. The high-risk countries of Asia have been included in the monitoring since fiscal 2017.

Prohibition against discrimination

We ensure equal opportunities for all employees by avoiding direct or indirect discrimination among our employees in respect of employment, treatment (compensation, opportunities to participate in training sessions, advancement opportunities, etc.) and other similar matters based on race, beliefs, gender, religion, nationality, ethnicity, age, marital status, disability, sexual preference, gender identity, military status, genetic information, social status, etc. Our purchasing transactions (including contracts and subcontracting) are carried out not only on the basis of economic rationales, but in an effort to fulfill our social responsibility in complying with laws and regulations, and respecting human rights and labor rights.

Freedom of association

TDK and some of our subsidiaries have labor unions.

In addition, in countries where labor unions are not permitted under local laws, regulations, and labor customs, and in Group companies where there are no unions, TDK holds sincere dialogue directly with employees or employee representatives based on the TDK Code of Conduct. In this manner we work to build sound relationships and resolve issues regardless of the circumstances. In all cases, we respect our workers' rights to freely form or join organizations of their choosing, and we do not discriminate or retaliate against workers who participate or seek to participate in organizations which bargain collectively or seek to bargain collectively such as labor unions.

Responsible sourcing of minerals

TDK began its response to the problem of conflict minerals following the enactment of the US Dodd-Frank Wall Street Reform and Consumer Protection Act in 2010. The TDK Group Policy on Conflict Minerals was formulated in April 2013, to promote initiatives in full compliance with the Due Diligence Guidance of the Organization for Economic Cooperation and Development (OECD).

In fiscal 2018, according to the conflict mineral survey conducted by TDK Group, no minerals involved in the funding of armed forces in the DR Congo or adjoining countries have been found. In order to reduce involvement not only in conflicts but also serious human rights violations and environmental pollution, TDK has expanded the scope of its responsible sourcing of minerals beyond those from conflict-affected and high-risk areas. In January 2019, we revised our policy, which is now entitled the “TDK Group Policy on Responsible Sourcing Minerals.” Under this revised policy, TDK will continue to promote responsible sourcing of minerals throughout the supply chain, including minerals such as tantalum, tin, tungsten, gold and cobalt, which may be sourced from not only conflict areas but also areas with high risks of misconduct, including human rights abuses and environmental destruction.

Related links

[TDK Group Policy on Responsible Sourcing Minerals](#)

[Responsible Sourcing of Minerals \(Our activities\)](#)

Training

TDK raises awareness of human rights issues through e-learning or in person training of all of our employees including those in the UK. Through training of internal auditors based on RBA requirements and CSR training that takes regional characteristics into consideration, we have been able to identify problems where they arise, including in China, Malaysia and Japan. In the supply chain, meanwhile, TDK provides educational tools to promote awareness at the time of CSR self-assessments.

In fiscal 2018, we conducted the following training sessions:

- CSR training in Indonesia for the people in the sites in Malaysia and Indonesia (20 persons participated)
- CSR session in China : On the TDK Code of Conduct and discussions on labor management (19 persons participated)

Sustainability | Society

Quality Assurance Activities

[Our Approach \(TDK's Thinking on Quality Assurance\)](#)
[Structure](#)
[Top Priority Measures in the "Advance to Zero Defects"](#)
[Prevention and Control of Exposure to Toxic Substances with Products as the Source](#)

Our Approach (TDK's Thinking on Quality Assurance)

TDK pursues the corporate mission of contributing to society through the manufacture and supply of outstanding electronic components.

"Quality" is the key management axis in this quest, positioned as the top priority in activities aimed at realizing top-caliber products built to consistently live up to customers' expectations.

Basic Philosophy

"Advance to Zero Defects"

TDK advocates the "Advance to Zero Defects" as its basic philosophy. This is manifested as to efforts to eliminate defects not only at the shipment stage, but also throughout the product life cycle spanning distribution, assembly by set manufacturers, application by end users and disposal.

Quality Policy

"Quality cannot be assured by final inspection!"

TDK firmly believes that "Quality cannot be assured by final inspection."

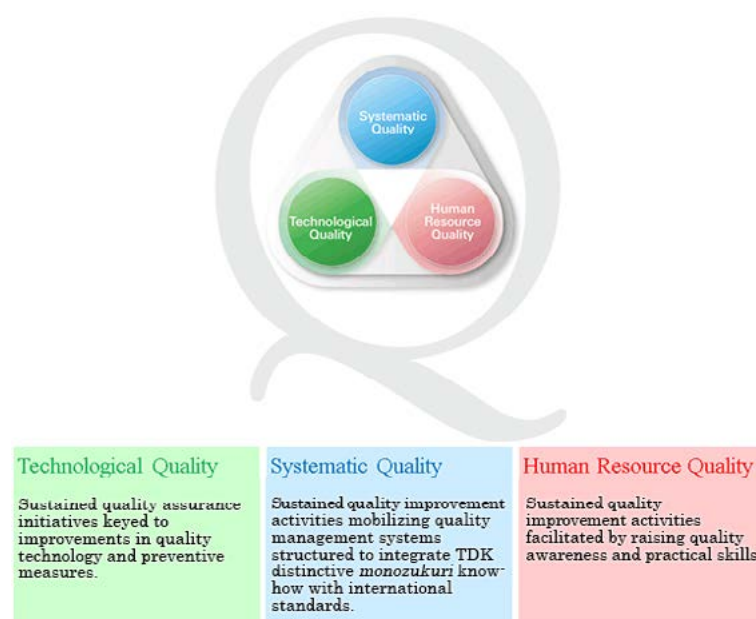
This policy stems from the idea that simply removing defective items at final stage inspection cannot ensure sufficient product quality. Rather, the goal is to firmly instill the attitude of "building in" quality at each process to assure the excellence of 100% "good products."

Therefore, TDK improves quality from the upstream level at the product design, process design, equipment development and all other stages. The goal is to eradicate defects and realize high-quality products that constantly earn customer satisfaction and trust.

Quality Targets

"Achieve Zero Defects" "Make TDK the leading quality-oriented company in the industry"

To ensure full satisfaction for customers using its products, TDK works to faithfully supply top-quality goods on a continuing basis. Quality assurance activities are advanced on the cornerstone of the three pivotal themes of "Personnel Quality," "Technical Quality" and "System Quality." This stance is marshaled to firmly address the targets of achieving zero defects and making TDK the leading quality-oriented company in the industry.



Structure

General Manager of Head Office Quality Assurance Function supervises QA activities in the Group as a whole, endeavors to share and develop principles and policies, and promotes activities by the entire Group toward their realization. In addition, each business division has a QA Function, the head of which supervises and executes QA activities in the division.

Related link

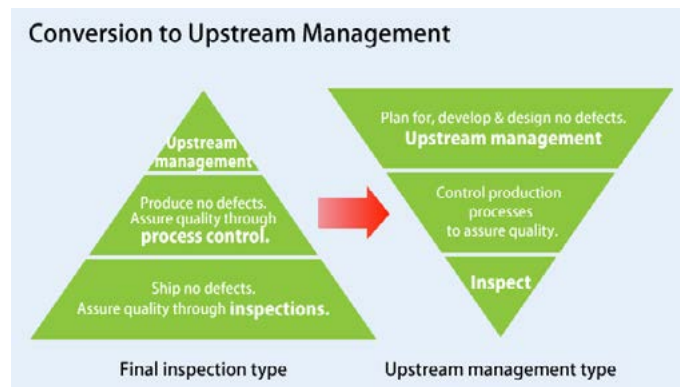
[Quality Assurance HQ General Manager's comment \(In Pursuit of Zero-Defect Product Quality\)](#)

Top Priority Measures in the "Advance to Zero Defects"

At TDK, our basic philosophy "Advance to Zero Defects" is being advanced through the following focal strategies.

(1) Strengthened design development processes

In its quest for zero defects, TDK thinks it is necessary to build product-manufacturing systems capable of turning out 100% good products in design activities. More specifically, steps are taken to define risks prone to occur in each process at an early stage, thereby creating and applying an upstream management type quality assurance system to eliminate such problems at the design phase.



(2) Strengthened product manufacturing processes

To achieve “Zero Defect Quality,” product design must be accompanied by worksite competence to establish reproducible manufacturing processes that eliminate variations. The main aspects that result in quality variations are “Equipment” and “Operations.” Variations caused by equipment were reduced by the introduction of the “Equipment Variation Assessment Method.” Variations caused by operations were addressed by the “Co-creation Challenge Activities” implemented as a small group activity. Along with this, steady endeavors to raise quality awareness and furnish quality education through small group activities are mustered to forge and uphold a “Quality First” corporate organization and culture.

TDK continues to enhance its engineering and Monozukuri power with further strengthening of its design development and product manufacturing processes. This is all part of the company’s relentless push to supply customers with higher quality products in more timely fashion.

(3) Strict compliance for quality assurance

We strive to fulfill our social responsibilities with high ethical standards in conducting corporate activities in compliance with laws and social norms. Toward this end, we continue working to improve product quality through the pursuit of zero defects, try to foster an awareness of what it means to place top priority on quality, and perform checks through compliance audits for quality.

(4) Responses to product security

In recent years, there have been incidents of new types of problem relating to IoT products that connect to networks including not just harm caused by cyber-attacks that exploit vulnerabilities via networks such as leaks of handled data or data tampering but also the use of hacked devices by attackers to cause harm.

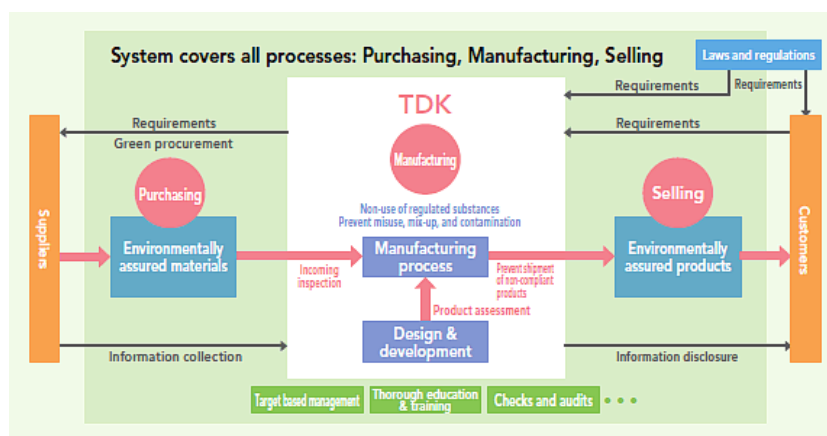
In light of the circumstances, TDK implements countermeasures in our IoT products according to the product functions, features, sales format, and other conditions. For example, it is necessary to take into consideration security in various stages such as using secure development methods and function safety structures from the component purchasing and production processes to the design stage, and after products are sold, maintenance methods such as firmware updates throughout operation and maintenance of applications that are installed on user devices.

Security measures for IoT products will be an essential technology for the coming era of digital transformation, and TDK has positioned IoT product security as an issue of product quality. In cooperation with relevant Functions, TDK has established implementation structures and rules to respond to cyber security issues including incidents involving TDK IoT products and will strive to provide products that gain the trust and confidence of customers.

Prevention and Control of Exposure to Toxic Substances with Products as the Source

To prevent and control exposure to toxic substances that originate with our products and that could threaten people's health and the environment, in 2004 TDK introduced an Environmental Product Quality Management system that is today operated under our Quality Management System (QMS). As a components manufacturer in the middle of the supply chain, we implement this system thoroughly for prevention and control at each of these stages purchasing, manufacturing, and selling.

Environmental Product Quality Management overview



Purchasing (1) — Green procurement

We established the TDK Chemical Substance Contained for Product Standards to ensure that no regulated chemical substances are contained in our products. We also established the TDK Green Procurement Standards, requiring of suppliers that materials, parts, and packaging contain no regulated chemical substances. We also require information on Substances of Very High Concern (SVHC) listed under the REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) regulation.

Related link

[Green Procurement Activities](#)

Purchasing (2) — Incoming inspection

TDK carefully audits information provided by suppliers regarding chemical substances contained in materials, parts, and packaging, to verify compliance with the TDK Chemical Substance Contained for Product Standards.

To prevent the possibility of regulated chemical substances being present due to human error or other causes, high-risk articles have been identified. For these we measure at acceptance the content of identified chemical substances using methods such as X-ray fluorescence analysis (XRF) to eliminate the possibility of a restricted substance being introduced into a work process.

The definition of a high-risk product and the frequency of measurement are reviewed on a continual basis with reference to actual results.

Manufacturing (1) — Environment-conscious design and product assessment

As an industrial manufacturer, our basic approach to protecting the environment is to carefully assess all aspects of a product in the design and development stage to prevent problems from arising later related to the product or any environmental impact.

Environmental considerations are a key aspect of elevating quality. We see environment-conscious design and product assessment as a way to prevent later claims and complaints. In each of the various processes from procurement of parts and materials, to manufacturing, distribution, usage, and disposal, we identify elements that have particular bearing on the environment, and we promote the development of new and sometimes revolutionary technologies to realize improvements.

Manufacturing (2) — Preventing misuse, mix-ups and contamination

TDK has a framework in place to ensure that the use of banned substances is not tolerated, and to minimize the risk of misuse, mix-ups, and contamination at mass production sites, such as in manufacturing processes, or at storage areas or warehouses. The measures taken consist of careful identification and control, separation, the establishment of procedures and standards, first-in and first-out practices, and controls for warehouse acceptance and dispatching.

In processes involving such equipment as solder tanks, where there is a possibility of contamination, we control lead levels using simplified test methods that have been developed jointly with solder manufacturers.

Selling (1) — Preventing shipment of non-compliant products

TDK supplies electronic components to customers in a wide range of industries, not only electronics and electrical equipment an industry in which the RoHS Directive is applicable. Others include the automobile, medical devices, and aerospace industries.

Some customers require products in compliance with the RoHS Directive (such as lead-free solder products), while others request products that do not conform to the RoHS Directive (such as lead-based solder products) for the purpose of securing higher levels of product reliability.

To prevent non-compliant products from being shipped erroneously, we have registered RoHS Directive compliance data for all of the products in our sales management computer system. This system automatically checks orders against customer specifications both at the time of order acceptance and when issuing shipping instructions. When a product that does not comply with the RoHS Directive is to be shipped, an electronic “customer confirmation received” form must be completed before the product can be shipped.

Selling (2) — Information disclosure

TDK has in place a framework for disclosing information on chemical substances contained in its products that is tied to our efforts to ensure the non-use of chemical substances that TDK has banned.

To respond promptly and accurately to inquiries from customers on chemical substances contained in products, we have implemented groupware to consolidate the management of processes extending from acceptance of customer inquiries by the sales departments to providing replies by the technical departments.

Customer Satisfaction

[Our Approach](#)
[Customer Recognition of TDK Quality](#)

Our Approach

CS (Customer Satisfaction) Activities Related to Electronic Components

TDK supplies electronic components as a flagship product line not only to electronic device set manufacturers directly linked to end consumers, but also to electronic assembly manufacturers and component manufacturers. In doing so, TDK makes every effort to ensure customer satisfaction (CS), through the three avenues as follows, and strives to achieve general satisfaction, encompassing quality, cost, delivery, technical supports and services, in order to become the company of choice for potential customers.

- Supplier evaluation information, whereby our business customers evaluate TDK products
- Product-related complaint information from our customers
- CS evaluation, whereby sales staff members evaluate TDK products from a customer's point of view

Supplier evaluation information

TDK obtains the results of supplier evaluations as completed by its customers. The evaluation ranks the different levels of customer satisfaction, with an "A" indicating that the customer is fully satisfied. TDK keeps track of changes in the percentage regarding the A rank, and passes this information to the relevant division responsible to improve CS.

Product-related complaints

TDK maintains a database of product-related complaints filed by customers around the world. Information is sent online to the involved departments without delay, so that swift action can be taken to improve CS. In addition, this system is designed to automatically send significant complaints to top management.

CS evaluation

In order to become the supplier of choice for our customers, our sales staff members make sure that they understand the needs of our customers. TDK makes every effort to improve CS by quickly understanding the details of customer complaints, and providing feedback to the relevant divisions so that they may take necessary remedial action.

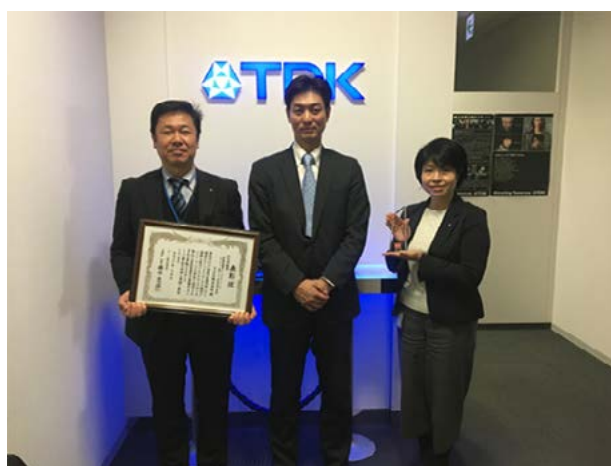
Customer Recognition of TDK Quality

Received the 2018 Suppliers Special Contribution Award from ROHM Semiconductor

TDK received the 2018 Supplier Special Contribution Award from ROHM Semiconductor.

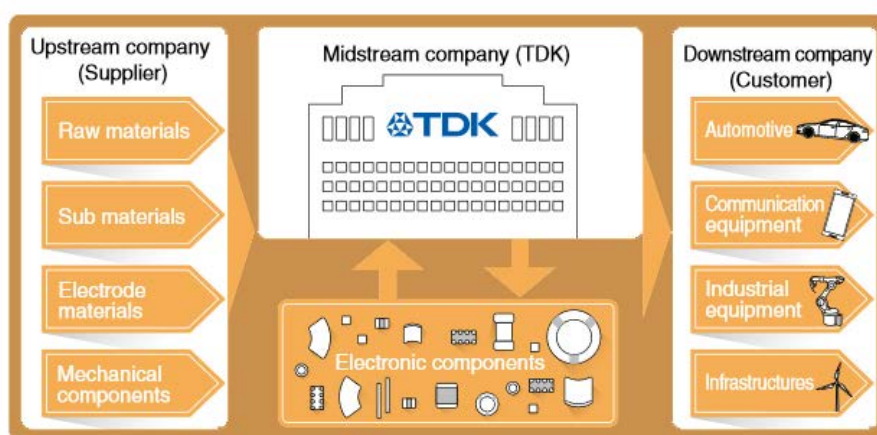
Reliable deliveries of automotive multilayer ceramic chip capacitors contributed to stable production, and TDK's responses to delivery deadlines in particular were highly recognized, leading to this award.

We will create detailed production plans based on requirement information and strive to undertake sales activities that please customers in order to contribute to the expansion of the automotive business.



Sustainability | Society

TDK's Supply Chain Responsibility



Executing Our Responsibility as a Midstream Company

TDK offers high-value-added solutions based on materials and components technologies. As globalization accelerates and we expand our target markets, we develop ongoing relationships with a wide range of customers and business partners. Buyer and supplier relationships with other companies are not uncommon in some business areas.

Responsible management of supply chains is coming under strict scrutiny with the strengthening of legal systems and international industry initiatives. For example, the United Kingdom passed the Modern Slavery Act in March 2015, and the Electronic Industry Citizenship Coalition (EICC) changed its name to the Responsible Business Alliance (RBA) in October 2017. Because these trends greatly affect TDK's business environment, it is vital that we take suitable measures in our business supply chains.

A shared understanding of social issues and common investigative practices is essential for the practical and effective implementation of CSR in the supply chain. To bring improvements in efficiency to the entire supply chain, TDK is working with other organizations from the stage of formulating rules, cooperating with the industry as a whole, and proposing the standardization of investigative methods.

Sustainability | Society

Responsible Sourcing of Minerals

[Our Approach](#)
[Structure](#)
[Fiscal 2018 Goals and Achievements](#)
[Future Activities](#)
[Concrete Activities](#)

Our Approach

Based on concerns that minerals mined in the Democratic Republic of the Congo (DRC) and adjoining countries serve as a source of funding for armed groups provisions on conflict minerals were incorporated in the US Dodd-Frank Wall Street Reform and Consumer Protection Act, which was enacted in July 2010, and its final rule was adopted in August 2012. The TDK Group Policy on Conflict Minerals was formulated in April 2013, to promote initiatives in full compliance with the Due Diligence Guidance of the Organization for Economic Cooperation and Development (OECD).

In order to reduce involvement not only in conflicts but also serious human rights violations and environmental pollution, TDK has expanded the scope of its responsible sourcing of minerals beyond those from conflict-affected and high-risk areas. In January 2019, we revised our policy, which is now entitled the “TDK Group Policy on Responsible Sourcing Minerals.” Under this revised policy, TDK will continue to promote responsible sourcing of minerals throughout the supply chain, including minerals such as tantalum, tin, tungsten, gold and cobalt, which may be sourced from not only conflict areas but also areas with high risks of misconduct, including human rights abuses and environmental destruction.

Related link

[TDK Group Policy on Responsible Sourcing Minerals](#)

Structure

The Headquarter Procurement Function and suppliers Quality Assurance Function supervise surveys of suppliers and replies to customers, respectively, and each Group company has installed a survey reply mechanism to respond.

Fiscal 2018 Goals and Achievements

Goal

- Confirmed DRC conflict-free supplier ratio: over 90%
- Monitor number of customer responses

Achievement

- Confirmed DRC conflict-free supplier ratio: 92.6%
- Implemented monitoring

Main activities and measures

- Implemented surveys at Group companies and promoted DRC conflict-free initiatives based on Group common KPI
- Promoted issue solutions in collaboration with industry associations

Future Activities

The TDK Group as a whole will continue to make efforts toward this end, including the setting in fiscal 2019 of the common KPIs of “confirmed DRC conflict-free supplier ratio of over 92%” and “monitor number of customer responses.”

TDK has the same expectations of suppliers and will urge suppliers that have not yet verified their DRC conflict-free status to make maximum efforts to do so.

TDK also will respond to inquiries from customers in a precise and timely manner.

Furthermore, collaboration with industry organizations will be essential to solve the expanding problem of responsible sourcing of minerals. TDK will continue to participate in such industrial discussions.

Concrete Activities

Responses to surveys and promotion of DRC Conflict-free at each group company

TDK uses the Conflict Minerals Reporting Template (CMRT) developed by the Responsible Minerals Initiative (RMI)* to facilitate the collection of sourcing information relating to conflict minerals.

In fiscal 2018, according to the conflict mineral survey conducted by our group companies, 92.6% of TDK's suppliers are DRC conflict-free, exceeding the year's goal of 90%. At this point in time, no minerals involved in the funding of armed forces in the DR Congo or adjoining countries have been confirmed.

Furthermore, TDK has been responding appropriately to requests from customers, and is monitoring the number of responses.

Related link

[Responsible Minerals Initiative](#)

* An organization of over 350 companies and associations that leads the effort for responsible mineral sourcing.

Cobalt reporting

TDK uses the Cobalt Reporting Template released by RMI to identify smelters.

Issues in survey responses

Within the CFSI conflict mineral survey framework, identification of smelters is essential to truly certify such operations as being DRC Conflict-Free. However, among products unable to confirm as being DRC Conflict-Free, and notably items for which supply chains contain long stages, there are instances when product groups with diversified electronic components are traded among component manufacturers, complicating the supply chain structure, there are frequent examples when the information gathered on smelters is incomplete, rendering it difficult to fully identify the smelters. Based on that and other factors, TDK products successfully found to be DRC Conflict-Free have been limited to certain product groups for which the supply chain stages are short.

* The earlier Conflict-Free Smelter Program (CFSP) was changed to the Responsible Minerals Assurance Process (RMAP) in June 2018, and the scope of risks was expanded beyond conflict risks in the DRC and adjoining countries.

Collaboration with industrial organizations

Addressing the responsible sourcing of minerals issue must be a comprehensive effort undertaken by all members of the supply chain. TDK has participated in the JEITA Responsible Minerals Trade Working Group from the beginning, and since fiscal 2013, TDK is a managing company of the group. The Japan Electronics and Information Technology Industries Association (JEITA) has concluded a memorandum of understanding (MOU) with the Responsible Business Alliance (RBA) and the Global e-Sustainability Initiative (GeSI) and is jointly pursuing efforts to resolve the responsible sourcing of minerals issue. During fiscal 2018, TDK participated in the following initiatives.

- Joined the Education and PR Team, participated as a speaker in and cooperated with operation of JEITA Responsible Minerals Sourcing Inquiry Briefings 2018 that was convened to raise awareness of the responsible sourcing of minerals issue and to promote understanding of the survey methods among secondary suppliers and others.
- As leader of the Data Exchange Standard Developing Team, collaborated in the push to revise the IPC-1755 conflict minerals data exchange standard for exchanging data between different computer systems based on EU regulations, submitted opinions to RMI on blockchain technology and exchanged ideas with smelter as part of determining preferable data exchange methods.
- Participation in the Japan Conflict-Free Sourcing Working Group of the automobile industry, coordinating feedback on the survey manual and its tools.
- Participation in the “Smelter Support Team” to jointly confirm risks with smelters.

Related link

[JEITA Responsible Minerals Trade Working Group](#)

Sustainability | Society

Efforts as a Supplier

(Consider the work environment at manufacturing sites)

Our Approach	Structure
Fiscal 2018 Goals and Achievements	Future Activities
Concrete Activities	

Our Approach

As a supplier from which customers procure products, TDK is aware that making efforts to consider social and environmental factors at the Group's production sites and fulfilling its social responsibility are important also for the continuation of business. TDK strives to identify issues and make improvements by, for example, implementing CSR self-checks and conducting CSR audits in response to risks in the countries where sites are located.

Structure

The Headquarter CSR Function supervises activities and promotes the appointment of responsible persons at each production site.

Fiscal 2018 Goals and Achievements

Goal

- Perform 100% CSR self-checks at manufacturing sites
- Perform 100% labor and ethics risk assessment at manufacturing sites
- Secure 100% opportunities for third-party CSR audits once every two years (High-risk countries of Asia including China)

Achievement

- Achievement
- Achievement
- Achievement (High-risk countries of Asia including China)

Main activities and measures

- Implemented CSR self-checks and labor and ethics risk assessments at all 81 sites
- Of the 34 targeted sites in the China and Asia region, implemented independent third-party CSR audits at five sites that have not undergone CSR audits by customers in the last two years
- CSR training is ongoing

Future Activities

TDK will strengthen existing activities and continue striving to identify issues and make improvements. In fiscal 2019 we will implement the following measures:

- Continue CSR self-checks and labor, human rights, and corporate ethics risk assessments at manufacturing sites
- Continue to secure opportunities for third-party CSR audits once every two years (High-risk countries of Asia including China)
- Continue implementation of CSR training

Concrete Activities

Implementing CSR self-check

TDK has compiled the TDK CSR Self-Check Sheet based on the Responsible Business Alliance (RBA) which is being used for self-diagnosis at production sites. The yearly self-evaluation serves to identify problems and promote efforts toward improvement in CSR activities at these sites, and it also enables us to swiftly respond to CSR surveys and inquiries from customers.

If there are any doubts with regard to responses on the check sheet, the CSR Group will look into the background of the issue. Direct visits to the production site may be carried out as necessary, with the aim of properly assessing the local situation and promoting enhanced CSR awareness.

In fiscal 2018, we reviewed questions in light of the revisions made to the RBA Code of Conduct in January 2018, added questions concerning human rights to gain a better understanding of conditions, and implemented self-checks.

Labor and human rights/corporate ethics risk assessment

TDK conducts risk assessments in the areas of labor and human rights and corporate ethics. The assessments are based on RBA requirements and are a response to social obligations, taking regional characteristics into consideration. In fiscal 2018, we reviewed questions in light of the revisions made to the RBA Code of Conduct in January 2018, added questions concerning human rights to gain a better understanding of conditions, and implemented self-checks. We are working to further improve management systems at our manufacturing sites by taking into account various factors in a timely fashion.

Implementing CSR self-audits by third party auditing companies

Customer electronic equipment manufacturers may carry out CSR audits in order to verify the state of their suppliers' compliance with RBA requirements or their own code of conduct.

As a supplier, TDK sees them as a good opportunity to further raise the level of our CSR activities. Regarding manufacturing sites located in China and the high-risk countries of Asia, once every two years we conduct CSR self-audits using third-party auditing companies, including customer CSR audits.

Each audited site made improvements regarding matters that were pointed out, and the CSR Group shared information with related HQ functions, calling for attention to be paid to these problems and getting them reflected in measures.

CSR internal auditor training

Based on a belief that gaining a systematic understanding of customer requirements relating to CSR and acquiring the basics necessary for assessment internal CSR measures are essential for raising the levels of future CSR activities, we are conducting CSR internal auditor training in consideration of the availability of human resources at sites.

CSR training conducted

CSR training is conducted with content tailored to regional needs with the aim of raising the levels of CSR activities. In fiscal 2018, CSR training was conducted in Indonesia and China. In Indonesia, information was shared on undertakings in different regions, and outside instructors gave lectures on the SDGs, diversity, and changes to the RBA. In China, the Code of Conduct was explained and a discussion on proper labor management was held.



Training in China (February 2019)

Sustainability | Society

Efforts as a Buyer

(Consider the work environment of suppliers)

Our Approach (Purchasing Policy and Purchasing Principles)	Structure
Fiscal 2018 Goals and Achievements	Future Activities
Concrete Activities	Purchasing Activities (TDK Corporation)

Our Approach (Purchasing Policy and Purchasing Principles)

TDK engages in global production with production bases in Japan and other Asian countries, the Americas, and Europe. Within the procurement activities that support production, the development of global procurement structures are crucial, and we strive to use those systems to develop products rapidly to remain competitive in the race to be first to market in the electronics industry.

Production bases engage in local procurement, but in today's society with ubiquitous IT networks, materials procurement activities require close collaboration with suppliers in ways that overcome time and distance. In addition, measures to fulfill corporate social responsibilities such as compliance with applicable laws and regulations, observance of social norms, and preservation of the global environment are promoted actively through partnerships between TDK and its suppliers.

TDK puts these principles into practice by engaging in purchasing activities that adhere to our Purchasing Policies.

Related link

[TDK's Purchasing Policies](#)

Structure

The Headquarter Procurement Function supervises and promotes activities in Group companies.

Each business group undertakes measures relating to sub-contractors.

The Headquarter Human Resources Function supervises and promotes activities relating to dispatch companies.

Fiscal 2018 Goals and Achievements

Goal

- CSR-compliant supplier ratio: over 95%
- Build a setup to conduct CSR efforts to sub-contractors
- Perform 100% CSR self-checks at dispatch companies used by manufacturing sites in the High-risk countries of Asia including China

Achievement

- CSR-compliant supplier ratio: 94.4%
- Build a setup to conduct CSR efforts to sub-contractors
- Achievement

Main activities and measures

- Requested CSR check sheet returns or implemented CSR audits in response to conditions at Group companies based on Group-wide shared KPIs
- Conducted training in each business group concerning approaches to sub-contractors
- Reviewed dispatch companies using CSR check sheets

Future Activities

TDK will promote efforts by the Group as a whole, continuing CSR procurement activities and, in fiscal 2019, TDK set a CSR-compliant supplier ratio of over 95% as a key performance indicator for suppliers throughout the Group. We will continue to promote supplier compliance to raise the level of compliance by the Group as a whole. We also confirmed conditions sub-contractors using CSR check sheets. We continue to conduct survey at dispatch companies using CSR check sheets.

Concrete Activities

Promotion of CSR Procurement

TDK treats CSR as a key component of its purchasing policy, while striving to earn understanding of the importance of CSR from suppliers and encourage increased awareness in that area. We adopted the TDK Supplier Code of Conduct and incorporate provisions into contractual agreements keyed to the specific conditions at each of our Group companies, while industriously advancing evaluations based on CSR check sheets, CSR audits, and other efforts. When problems are found in the details, individual requests for improvements are issued. In fiscal 2018, the results of self-assessments confirmed that 94.4% of suppliers of our Group companies were CSR compliant, a 3.2% improvement over fiscal 2017, but still short of the 95% target. We will continue to strengthen our efforts with regard to Group companies and suppliers.

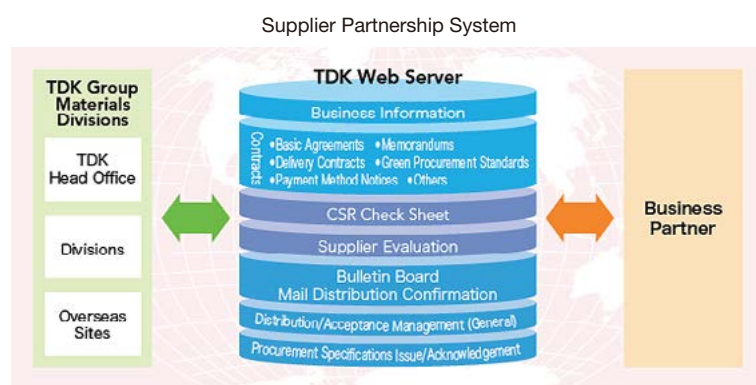
Related link

[TDK Supplier Code of Conduct](#)

CSR check sheet through the Supplier Partnership System* (TDK Corporation)

TDK requires its suppliers to reply to a CSR check sheet through the Supplier Partnership System. This check sheet contains 56 questions considered particularly vital by TDK, primarily covering “Human rights and labor,” “Environment,” “Occupational health and safety,” “Fair trade and ethics” and “Information security.” The questions are based on CSR compliance items in the Responsible Business Alliance (RBA), and assist in accurate assessments of the actual conditions at suppliers. To raise both supplier awareness and motivation to make improvements, the check sheet is designed to immediately display the results on-screen when answering questions. If problems occur with responses, individual requests are issued for improvements.

* Supplier Partnership System: A web-based technology providing integrated management of business information, distribution of procurement specifications, sharing of written agreements and other information conventionally handled as paper documents or on magnetic storage media. The system supports greater operational speed and efficiency for both TDK and its suppliers

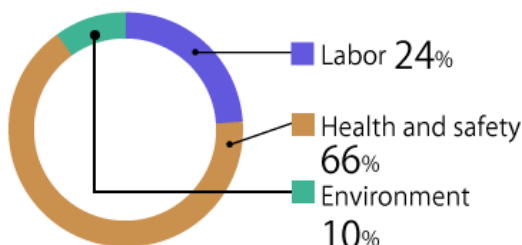


CSR audits of major sub-contractors

Since fiscal 2015, TDK has been conducting biennial CSR audits of major sub-contractors upon whom TDK has high dependence in China, a country in which there is high risk in the labor environment.

In fiscal 2017, three CSR audits were conducted, and 21 issues were identified in total. One important item was a deficiency in protective equipment for workers, and requests were made for improvements in this area. In fiscal 2018, there were no sub-contractors subjected to CSR audit.

Breakdown of CSR audits at Chinese major sub-contractors (FY 2017)



CSR self check of labor dispatch companies

The high-risk countries of Asia including China, where human rights and recruitment risks are considered to be high, improper management practices by labor dispatch companies are frequently discovered.

In fiscal 2018, we conducted CSR self-assessments that included labor dispatch companies used by manufacturing sites in the high-risk countries of Asia including China.

Purchasing Activities (TDK Corporation)

Supplier evaluations

With the aim of ensuring sound business conduct, TDK implements regular supplier examinations. An examination is always conducted when newly registering a company as a supplier, and at regular intervals thereafter to decide whether to continue the relationship. The main categories covered by the examination are quality management, chemical substances* management, environmental management, and corporate social responsibility (CSR) including strict observation of human rights and other legal obligations as well as compliance with social norms. Any problems that come to light through the examination are disclosed to the supplier with a request for corrections or improvements.

* Survey items for chemical substances are based on the "TDK Green Procurement Standards."

Related link

[TDK Green Procurement Activities](#)

Green procurement

In order to promote green procurement aimed at the priority purchase of products that contribute to reducing the environmental load and fulfill social responsibility, TDK established the TDK Green Procurement Standards in April 1999. These standards are revised as necessary to take account of laws and regulations in Japan and other countries, changes in social requirements, and other factors. They can be viewed on the TDK website.

In April 2018 TDK issued version 9 of the TDK Green Procurement Standards and distributed copies to all suppliers. The main revisions involve reviews of modifications to laws and regulations related to the regulation of chemical substances, as well as our response to conflict minerals. The survey format was also brought into line with chemSHERPA,* a new tool that facilitates sharing information on chemical substances in products being developed by the Ministry of Economy, Trade and Industry.

TDK's procurement master provides links to data consistent with TDK's green procurement standards, firmly controls the content of prohibited substances and chemical substances requiring content management, and discloses and provides information as necessary.

* A scheme for communicating information on chemical substances contained in products that can be used throughout a supply chain.

Strengthening of BCP/BCM in the supply chain

In unforeseen circumstances, such as the outbreak of a large-scale natural disaster, TDK, as a member of the supply chain, has a duty to share social responsibility with suppliers and meet demands so as to ensure the stable supply of products required by customers. Recognizing that the securing of stable supplies is an important responsibility, TDK addresses this issue in three main ways:

1. BCP/BCM surveys of suppliers
2. Advance collection and arrangement of information to use in an emergency
3. Prompt initial responses using a BCP Confirmation System

Especially with regard to BCP/BCM surveys of suppliers, as per item 1, initiatives based on industry-wide consultations have begun to emerge. A subcommittee tasked with examining the issue was formed in 2013 under the umbrella of the JEITA Materials Committee, and a "Supply Chain Business Plan Survey" has been formulated. A total of 17 set manufacturers and parts manufacturers are participating in the subcommittee,

which has identified a number of risk management items from the procurement viewpoint for dealing with various disaster and accident possibilities. TDK is an active participant in this endeavor, and we intend to make full use of the survey that was published by the JEITA Materials Committee in September 2014, and carry out BCP/BCM surveys.

* BCP: Business Continuity Plan

* BCM: Business Continuity Management

Strengthening of compliance

TDK has clarified a group-wide policy regarding offers of gifts and entertainment from suppliers, publicized that policy throughout the Group, and requested the understanding and cooperation of suppliers.

Furthermore, regarding the exclusion of antisocial forces, TDK conducts preliminary surveys of suppliers when starting or restarting business with them.

Sustainability | Society

Global Human Resources Strategy

Our Approach

The TDK Group has grown rapidly through multiple mergers and acquisitions (M&As). Today the group boasts a portfolio of more than 100 companies and over 100,000 group employees. Moreover, only 10% of TDK personnel are now located in Japan and roughly 80% have joined the group through M&As.

This growth has been followed by new needs in the area of Human Resources. Key challenges include establishing a platform to ensure that diverse entities and talented individuals can fully engage as group members rooted in a core concept of harnessing diversity for greater resilience and global success.

For the above, we made with the HR Vision and Mission Statement.

Vision

Transform TDK into a more resilient company, prepare as 'trusted enabler' for the future through highly engaged employees.

Mission Statement

We will connect TDK Group companies and employees by utilizing their unique strength of diversity.

Sustainability | Society

Develop Global Human Resources

Our Approach	Structure
Fiscal 2018 Goals and Achievements	Future Activities
Concrete Activities	Developing Self-Sustained Human Resources (Programs to Develop and Cultivate Abilities) (TDK Corporation)

Our Approach

TDK conducts its business together with numerous Group companies operating worldwide. To supply optimum values and solutions to customers located around the world, we believe it is important for the TDK Group to maximize its synergy and transcend the limitations of time, geography, and culture. In order to promote the true globalization of TDK in this way, the most important thing, we believe, is to foster the human resources that are fundamental for this purpose.

Structure

TDK has established the Global HR Department within the Global Human Resources Division to develop various policies on a global scale.

Fiscal 2018 Goals and Achievements

Goals

- Introduce Global Management Development Training
- Adapt Global and Local development measures in selective regions
- Global roll out of one comprehensive English test

Achievement

- Successful completion of Territorial Career Development Program (TCDP) in the four territories—Asia, Americas, Greater China, Europe (~100 persons participate)
- Alignment between Global and Local development measures in selective regions
- English test globally rolled out and global English trainings introduced

Main activities and measures

- Introduction of globally common English test and English training
- Implement Territorial Career Development Program (TCDP) in the four territories

Future Activities

- Continue Global Management Development Training (TCDP)
- Introduce newly Global Management Development Training (Advanced Management Program AMP)
- Enhance English training program

Concrete Activities

TCDP (Territorial Career Development Program)

The Territorial Career Development Program (TCDP) was introduced in fiscal year T123 to help develop talented employees throughout the TDK Group.

The TCDP aims at employees of any function from any location within the TDK group. In the selection process, local site leaders propose candidates. Participants will then be selected from among these candidates by a committee of management representatives in each territory.

The program is held in English and consists of generally five training sessions that take place at different TDK sites in each region, giving participants a chance to get to know as many of the company's business fields as possible. It is the TCDP's unique approach to having a group project activity with a team of 5~6 members, in addition to the classroom training and lecture-style studies. The participants are working together in group projects and have to apply the skills they have learned within the TCDP. At the end of the program, they present the culmination of their efforts to their territorial committee.

Business benefits

- The TCDP prepares talents from all over the world to become the next generation leaders of TDK.
- Deepen understanding of the basic methods and principles used in management, develop leadership skills, increase employee engagement, and generally improve management competence
- The TCDP will support global succession planning for key positions and the development of globally-capable leaders who can contribute in various fields
- Building strong networks between TDK Group employees

Related link

[Launched the next generation leader development program within the TDK Group](#)

AMP (Advanced Management Program)

AMP was introduced in fiscal 2019 to further increase leadership competencies on an advanced level. The goal of AMP is to support and empower managers in their transition from Management to General Management and further to higher level roles, by improving their leadership, strategy, innovation and change management competencies so that they can better manage complex strategic issues.

AMP also provides participants with the ideal opportunity to network, thus creating even stronger personal bonds across the entire TDK Group.

AMP will be offered yearly and is specifically targeted and tailored to the training requirements of upper management. Participants are either GMs or newly appointed GMs and DGMs (or candidates who are promoted to such positions). Each cohort is limited to 20-25 participants.

AMP is a 7-month program, encompassing 3 distinct face-to-face modules and one online module.

The face-to-face modules take place in Singapore, Lausanne and Tokyo in April, June and October respectively. For these three modules, participants will be out-of-office for approximately 14 days (in total). The online module will be conducted between April and June.

Business benefits

- An integral part of AMP are impact projects (e.g. how TDK can ensure value creation in the long-term), upon which participants will reflect and work on. The outcome of these projects will be presented to the members of the Executive Committee
- AMP is supporting global succession planning with the preparation of managers to transition to General Management. It does so by developing future leaders and strengthening competences around strategy, innovation and transformation
- Increasing network and create stronger bonds across the TDK Group

Introduce English training program globally

The goal of the Global Communication & English project is to enhance the fluency of communication in English within the TDK group world-wide. The first phase, which was a standard English speaking test for our employees, was implemented in T123 with the aim of establishing the English training requirement of individual employees. People who need to improve their English language skills are guided to suitable training through the Global HR department upon completion of the test.

Developing Self-Sustained Human Resources (Programs to Develop and Cultivate Abilities) (TDK Corporation)

The ideal way to realize TDK's corporate motto of "Contribute to culture and industry through creativity" is for every individual member to engage in self-sustained work. The objective of human resource development at TDK is to cultivate such self-sustained human resources. Self-sustained human resources are defined as "people who can think for themselves, make challenges with courage, cope well with change, and keep going right to the finish."

In order to achieve this objective, TDK has established educational structure comprising skill development and education programs aimed at enabling employees to master self-sustained work from a young age in a phased manner.

Human resource facilitating proactive, self-led action—Training programs on different levels (TDK Corporation)

TDK has expectations that its global human resources will take up the challenge of picking up leadership positions with a view to achieving their goals and dreams. Our subsection chief training, designed for beginning-level managers and leaders, is intended to give our employees the ability to take up new challenges and set goals, as well as to improve their ability to boost results achieved by the organization as a whole. In addition, the department manager and section chief training, imparts self-led management ability through assessment training, as well as boosting ability in this area. These training sessions allow employees to set challenging goals ranks above their current level, leading in turn to self-innovation by reaching these goals.

Developing human resources willing to take on new challenges—New Business Creation Training Program (TDK Corporation)

As one component of policies to reform corporate culture and forge a culture where employees are unafraid of the occasional failure, as of April 2015 we have launched the New Business Creation Training Program to facilitate proactive employee involvement in generating new business and new ideas. Through a system where employees self-recommend to join the program, participants re-affirm TDK's founding philosophy as a university-generated venture company and engage in a process of repeated discussion and feedback to put into practice the new products, businesses, and ideas that they have conceived. By encouraging employees to take the initiative, we are developing human resources who can set and achieve lofty targets.

Developing global business skills—Overseas Trainee Program (TDK Corporation)

TDK operates the Overseas Trainee Program with a view to the TDK Group's global development. It is critical that teams of employees of different cultures work together, training in global business promotion skills to achieve our common business goals. By sending young employees to group companies in other countries, we develop precisely these skills. Through this program, trainees are strategically assigned to our locations in countries around the world. Our employees are not only sent from Japan to other countries but from other countries to Japan.

Global business skills development program—Cross-cultural Communication Training (TDK Corporation)

In addition to boosting language training programs, primarily e-learning, we bolster cross-cultural communication training via regional training. The goal is to promote global business skills overall.

Some comments we received from employees taking part in the training were as follows: "I gained a theoretical understanding that helped me to resolve a vague sense of discomfort I'd had about certain (intercultural) things": "I'm now comfortable about being sent abroad": and "I was really happy with the training and found it highly significant, because I got to learn a lot of interesting things."

A site for creation—TDK MAKER DOJO (TDK Corporation)

In February 2016, TDK established the “Maker Dojo” as a place where new concepts and ideas come into being—a venue where creativity and the spirit of taking up new challenges comes into play. This manufacturer-dedicated space is intended to be a place where all TDK employees can stop in casually at any time. At the Dojo, employees can experiment with making products using TDK components, and ascertain whether or not these prototypes are easy to use and easy to develop. The goal is to be a forum for producing new ideas and sharing information by holding ideathons and other events where engineers of different departments and specialties teaching each other about the technologies they know best and diverse participants form groups on a specific topic to engage in dialogue and combine their respective knowledge, ideas, and passions to generate new ideas. This is a place where ideas actually take shape—that is, it serves as a Y-Gaya space for engineers.

Overseas Study System (TDK Corporation)

In 2005, TDK reorganized its overseas study program to include a new management course (MBA study in Japan or overseas), a law course (study at a law school overseas or in Japan), and a technology management course (MOT study in Japan or overseas). These three courses aim to train professionals equipped with the knowledge and skills needed for performing their duties.

Technical Exchange with Overseas Sites and Overseas Universities (TDK Corporation)

TDK has concluded a tie-up and engages in joint research with the University of Alabama in the United States, which is well known worldwide for its outstanding ideas and technologies. In addition, TDK dispatches engineers to overseas sites through its personnel exchange system so that they can acquire state-of-the-art technical expertise and technological information and broaden their horizons.

Related link

[Employee Performance Data](#)

Sustainability | Society

Cultivate a Corporate Culture that Respects Diversity

[Our Approach](#)
[Structure](#)
[Fiscal 2018 Goals and Achievements](#)
[Future Activities](#)
[Concrete Activities](#)
[Respecting the Individual and Providing a Worry-Free Work Environment \(TDK Corporation\)](#)
[Organizational Structure for Maximizing the Potential of Each Employee \(Human Resources Institutions\) \(TDK Corporation\)](#)

Our Approach

The TDK Group comprises numerous affiliated companies with business operations around the globe. We believe that we can continue generating innovative creativity by establishing an environment in which employees with diverse backgrounds can display their skills. This is crucial for realizing corporate growth.

Structure

TDK is promoting activities according to the situation of each site or legal entity under the support of the Human Resources Function.

Fiscal 2018 Goals and Achievements

Goal

- Expand scope and improve accuracy of information in the global talent management system*
- Implement human resources meetings at a global and territorial level

Achievement

- Talent management system extended to the Sales function worldwide and extension to TDK Top Key Positions started
- Global Human resources meeting with participation of all major legal entities took place in May 2018.
- Territorial HR meetings with participation of local HR managers launched at all territories

Main activities and measures

- Extend scope of talent management system to all territories which are part of the worldwide Sales function

* A centralized management structure for employee skills, experience, and development plans. The system makes it possible to discover and develop human resources on a global scale and assign the right people to the right positions.

Future Activities

- Continue expansion of scope for talent management system.
- Establish a diversity policy.
- Enforce the establishment of a Human Resources network through further organisation of Global and Territorial Human Resources Meetings.
- Start succession planning for identified Top Key Positions at the TDK Group.

Concrete Activities

Voices of staff working outside of their home country share their background

Technical Collaboration and Respecting Local Business Culture

I work in Israel, a country that has many innovative startups and prestigious universities. My job is to assess promising local technologies and to plan and promote collaboration with TDK's technology and products.

When having a discussion, if you have an opinion to express, you sometimes have to interrupt others to get it out. That is a big difference from how things are done in Japan, so I appreciate the effort it takes to adapt to a different business culture. Our office has opened only recently, so we have no storehouse of know-how, and there are still many problems we face trying to communicate with each other in English, but we have been getting tremendous assistance from the folks at TDK-Lambda in Israel. While enjoying myself on the job, I will continue exploring ways to achieve better collaborations that will lead to outstanding new TDK products and services.



Narutoshi Fukuzawa
Manager
Israel R&D Office, Technology Planning Group
Technology and Intellectual Property HQ
TDK Corporation

Meeting People of All Kinds Leads to Personal Growth

My job is to customize software products to meet the needs of customer around the world and to support resolving issues prior to the start of production. The most exciting things are learning a wide range of things both through my job and by working with others, plus working with new technologies.

When you work overseas, it is important to step out of your personal comfort zone. In San Jose I am able to encounter people who have different cultures, languages and styles of working.

Meeting those people and building trust have helped me to grow as a person. I will do my best to support customers with the idea of seeing things from "customer focus" in our TDK Value.



Suma Veerabhadrapa
Sr. Staff Application Engineer
MEMS Sensor Business Group
Sensor Systems Business Company
InvenSense, Inc.

Respecting the Individual and Providing a Worry-Free Work Environment (TDK Corporation)

Efforts to Respect Human Rights and Equal Opportunity—Diversity Promotion Action Plan

TDK includes provisions regarding respect for human rights and prohibiting discrimination into the TDK Code of Conduct.

We implement specific initiatives on respecting human rights, equal opportunity, etc., including awareness-raising education for employees, and special counseling services including a telephone "help line." We have also established an array of systems designed to facilitate childcare and nursing care (childcare leave system, nursing care leave system, short-time work system, etc.).

As a result of creating environments that facilitate work and promote workstyles that maintain a good work-life balance, TDK was certified by the director of the Tokyo Labor Bureau as a Compliance General Business Operator pursuant to the Act on Advancement of Measures to Support Raising Next-Generation Children and acquired the next-generation certification mark (commonly known as the Kurumin mark) in fiscal 2014.

In addition, we have devised and have been carrying out the following two Action Plans in regard to the Act to Advance Women's Success at Work, which was enacted in April 2016, as follows:

1. The goal for the average percentage of women joining the company from 2020 to 2022 is a minimum of 30%.
2. Established a specialized department to promote the empowerment of women.

Our plan is to continue to develop systems that are useful to our employees in their course of growth, and to implement new systems that are tailored to developing social trends as well as to the needs of our employees.

Related link

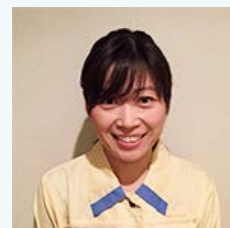
[Employee Performance Data](#)

Voice of an Employee about TDK's Childbirth and Child-Care Support System

The period of childbirth and child-care leave was very precious for me, because it enabled me to spend more time with my family and watch my child growing and smiling every day. Although we still faced the problem of waiting for an opening at a day-care facility, after 16 months I returned to work. Before taking child-care leave, I had been worried about whether I would be able to do my job properly after my return, but the people around me have been very supportive. Little by little I am becoming accustomed to my new job and recovering my pace. At the moment I am making use of the flextime system, which is very helpful, because I have to take my child to and from the nursery.

Since my child was born, I have to take more care about my use of time. When I get to work, the first thing I do is compile a schedule for the day, calculating backward from my finishing time. Time is limited, so I want to make sure that I can work efficiently and not be a nuisance to others. But everyone is very understanding. It's a wonderful environment. The problem of children having to wait to gain admission to day-care centers is continuing, so I hope that the period of child-care leave can be made longer in the future.

At the moment I am enjoying a very well-balanced life every day. I hope that other employees also who are thinking about how to balance child raising and work can make the most of the various schemes available and, with the support of those around them, enjoy a work-life balance.



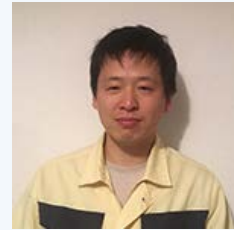
Tomomi Iwamoto
Development Office 4
Material Development Center
Technology and Intellectual Property
HQ
TDK Corporation

Voice of an employee about the childbirth/child care support system

I decided to take child-care leave half a year before my second child was born. Because both my wife and I work, I planned to take the leave and dedicate myself to child-care for six months up to our child's first birthday, which is the limit for eligibility. This would allow my wife to return to work. I had planned and prepared for this long before because I needed to prepare for doing household chores and child-rearing. I wanted to be able to handle the sudden increase in time I spent on child-care. Also, preparing would help me not to panic in an emergency such as a sudden illness.

In the beginning I was unsure if I would be able to handle two things simultaneously that were unfamiliar to me—housework and child-care. The first two or three months were tough, but gradually I began to find my rhythm, and in the end I felt it was a very meaningful time spent with my young children. When my older kid's nursery school was on spring break, I had two kids to take care of, and it was really hard to find the time to do the housework, but the experience gave me the confidence that now I could handle anything even if my wife wasn't home. After returning to work, I used the flextime system, which allows me to take my kid to nursery school before work.

I informed my boss six months in advance before taking child-care leave and handed over my work to others for the period of my absence. Everyone in the office was on board with my child-care leave, and it couldn't have happened without that understanding. I'm sure that my boss and colleagues, and my section had to do more work because I wasn't there, or at least they felt the impact of my absence during that time period. In an aging society with declining birthrate like ours, finding a balance between work and child-rearing is important. I hope there comes a day when technology advances enough that things like robots and artificial intelligence help us to overcome difficulties, especially in terms of labor.



Takayasu Kanaya

Process Development Section2

Process Development Team

Process Technology Group ATF

Operation

Thin Film Wafer Foundry Business

Division

TDK Corporation

The TDK Rehiring System

In April 2017 TDK revised its reemployment system, by which it had been rehiring employees after their mandatory retirement, and began the operation of a new “second-career system.” The purpose of this system is to make further effective use of the knowledge and experience possessed by senior employees and to fulfill TDK’s social responsibility as a corporation in response to revision of the Act Concerning Stabilization of Employment of Elderly Persons. In addition, this system is also being introduced at affiliated companies in Japan with a view to promoting the reemployment of employees reaching mandatory retirement age.

A “Welcome Back” system was instituted in October 2017 to rehire employees who had to quit due to unavoidable circumstances, such as childbirth or child-care, or elderly care situations.

Work Style Options to Accommodate Spousal Relocation

In October 2017, we introduced two new systems—a relocation system for employees whose spouses have been relocated in Japan and a leave system for employees whose spouses have been relocated overseas. With these systems in place, even if it becomes difficult to continue working in one’s current workplace due to the relocation of one’s spouse, employees can now choose to relocate or take a leave to be with their spouse. The work style options provided by TDK are designed to allow employees to balance work with various events in their lives, a policy that aims to make TDK a company where people feel safe working at for a long time.

Organizational Structure for Maximizing the Potential of Each Employee (Human Resources Institutions) (TDK Corporation)

TDK has a number of systems in place which are geared to helping each and every employee member discover and develop their true potential.

In-house Recruiting System

In 2000, we introduced an active in-house hiring system under which employees can apply for new positions posted on the internal recruitment board directly with the Human Resources Department, without going through their superiors. This system aims at promoting the principle of “the right person for the right job” throughout the TDK Group, to respond in a timely manner to changes in the organizational makeup and staffing requirements of the organization. The system provides opportunities for career development to employees who have the desire and ability to try and shape their careers on their own initiative. As of March 2019, 215 applicants had fulfilled the relevant requirements and taken on new positions.

Career Option System

In addition to the in-house hiring system, TDK introduced the career option system in January 2006, giving employees the opportunity to apply for transfer to a desired department or position. This system is designed to provide incentives for further self-growth and for making a positive contribution to the development of TDK. It also aims at stimulating employees to reassess their career plans from various perspectives.

Self-Determined Reporting System

A self-determined reporting system has been introduced for the purpose of supporting efforts by individual employees to develop their own careers and abilities, as well as to help ensure the best possible match between each job and the person performing it. Once a year, employees can report directly to the Human Resources Department, indicating which positions they want and which business sites they would like to work at, as well as the extent to which they are satisfied with their current positions. Employees desiring an interview have the opportunity to directly explain their choices during a session at the Human Resources Department.

The opportunity to have a dialog with the Human Resources Department on a regular basis encourages employees to think seriously about their own careers, and also supports efforts such as transfer and participation in education and training for new positions. In this way, it helps employees shape their own career.

Business Creation and Proposal Framework

TDK was born as a type of venture company with the aim of commercializing the ferrite material that had been developed at the Electrical Department of the Tokyo Institute of Technology.

Right from the outset, the concept of creating an enterprise through new products and ideas realized by challenging difficult tasks, and thereby contributing to culture and industry was central to TDK, and we believe that we continue in this vein. The Business Creation and Proposal Framework was created in April 2015 as a means to support the spirit of challenge. The idea is to provide the necessary resources for new business areas with the potential to enhance the corporate value of TDK, thereby helping to launch in-house ventures. In addition, the New Business Creation Training Program for supporting the devising of business plans also was established with similar aims.

Related link

[Employee Performance Data](#)

Sustainability | Society

Safety and Health

Our Approach (TDK Occupational Health and Safety Charter)	Structure
Promoting an Occupational Health and Safety Management System (OHSMS)	Fiscal 2018 Goals and Achievements
Future Activities	Concrete Activities
Employee Health Management (TDK Corporation)	

Our Approach (TDK Occupational Health and Safety Charter)

As the health and safety policy of the Group as a whole, TDK has compiled the TDK Occupational Health and Safety Charter, consisting of the Basic Principle of Occupational Health and Safety and the Occupational Health and Safety Policy with the aim of forming safe and healthy workplace environments. On the basis of this charter, as a basic plan for specific activities, TDK has formulated the Health and Safety Basic Plan, which it strives to implement with the aim of reducing the number of significant labor accidents to zero.

TDK Occupational Health and Safety Charter

TDK occupational health and safety charter applies to every organization in the TDK Group worldwide.

Basic Principle of Occupational Health and Safety

In order for our employees to perform their duties under the best conditions, the TDK Group is committed to occupational health and safety management by working together to ensure a safe and healthy working environment as the primary responsibility of our business.

Occupational Health and Safety Policy

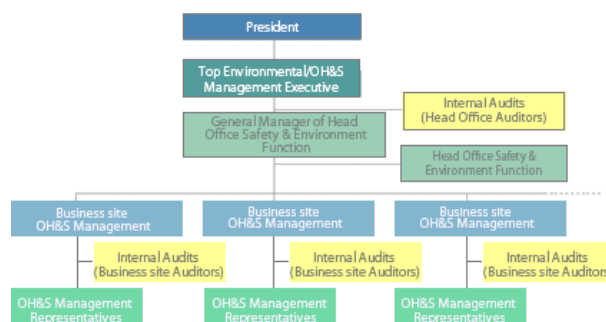
Based on the basic principle of occupational health and safety, the TDK Group shall enhance occupational health and safety actions that will enable the proper response to changes in production patterns, new technology, and working environment, in order to promote "zero" risk in the workplace and prevent job-related injury and ill health with the participation of all employees.

1. We shall provide necessary management resources and assure continual improvement in the occupational health and safety management system and related performance which shall be reviewed regularly or as necessary.
2. We shall establish voluntary standards for improving our management system to comply with all regulations and other agreements relating to occupational health and safety.
3. We shall continuously reduce risks by evaluating risks arising from hazards, setting objectives, and making efforts to minimize risks within the scope of our activities.
4. We shall build a framework for achieving the effective functioning of the occupational health and safety management system with clearly defined responsibilities.
5. We shall educate and train each level of employee to enhance all employees' comprehension and awareness in making a safe and healthy working environment.
6. We shall respect employees' opinions concerning occupational health and safety through effective communication, and provide necessary information and assistance to suppliers and subcontractors about occupational health and safety while they are on TDK premises.
7. We shall improve the work environment and assist toward employees' health maintenance and enhancement of employees livelihood by promoting "physical and mental health" as essential elements for employees' wellbeing.

Established July 1, 2003
Revised April 1, 2011 (Rev. 4)

Structure

TDK has set up a promotional structure based on the Occupational Health and Safety Management System headed by the president.



Promoting an Occupational Health and Safety Management System (OHSMS)

TDK has established an Occupational Health and Safety Management System (TDK OHSMS) as an effective way to reduce latent risks and hazards at the workplace and create a safe and healthy work environment. This system is also seen to contribute to efficiency and productivity and to enhanced product quality. It has been implemented at all TDK manufacturing sites.

TDK is now in the process of updating the certification for sites that have OHSAS 18001* certification to the new ISO 45001 certification issued in March 2018, one by one.

* OHSAS 18001: Occupational Health and Safety Assessment Series created by an international consortium as standard specifications for managing health and safety in the workplace. The consortium consists of standards associations and evaluation organizations in Ireland, South Africa, and Britain.

Related Links

[Facilities with ISO14001 and OHSAS18001\(ISO45001\) Certification](#)

Fiscal 2018 Goals and Achievements

Goal

- Achieve the "ZERO significant labor accident"

Achievement

- Achieve the "ZERO significant labor accident"

Main activities and measures

- Mitigate the significant safety risks
- Promote the safety patrol by site top manager thoroughly

Related Links

[Occurrence of Accidents at Work: Employee Performance Data](#)

Future Activities

With the goal of creating safe, healthy working environments, we are implementing thorough safety measures at facilities to improve working conditions, establishing basic safety procedures, and working to reduce risks based on risk assessments. We will also work to maintain a record of zero significant labor accidents.

Concrete Activities

- On September 1, 2017, we opened the Safety Training Center at the South Site of Nikaho Plant. The center provides experience-based hazard training based on the concept of “look, listen and feel” to raise workers’ sensitivity to risk factors. As of March 31, 2019, a total of 4,644 employees had attended the training in the Akita district. Plans call for 5,000 employees to complete the training by the end of September 2019, and starting in October, the training will be conducted at sites outside the Akita region using a traveling caravan and other means.
- We established a system of environmental health & safety (EHS) coordinators in Japan, China, the ASEAN region, Europe, and the U.S., for developing health and safety activities suited to the situation in each region. We are also trying to improve the level of occupational health and safety activities by implementing factory safety diagnostics and by sharing best practices at conferences that address safe work environments.

Employee Health Management (TDK Corporation)

Working to Ensure Good Health

The company considers the health of employees and their families to be a top priority. We recognize the creation of a safe, healthy work environment as a key management issue for enabling employees to carry out their duties under the best working conditions. We will take action to ensure that such an environment is created.

To keep our staff healthy, we not only conduct physical examinations of employees on a regular basis, we also have industrial physicians, health maintenance technicians, and dentists on staff at our major locations, creating an environment in which employees can address their health concerns and have dental checkups on an everyday basis. Also, the employee health insurance union has arranged for an outside service that offers telephone health consultations 24 hours a day, besides implementing various initiatives such as the "Health Challenge Campaign" aimed at supporting lifestyle improvements among employees.

In the Akita region, the company is implementing a Total Health Promotion (THP) Plan, mainly through its health management centers. Through this program, which offers employees health guidance and exercise programs tailored to their individual needs, we are boosting awareness of health-related matters, such as the importance of exercising and leading a healthy lifestyle.

Furthermore, in fiscal 2018 we set up a health management project promotion committee that is composed of people from the company, health insurance associations, occupational health workers, and labor unions. The committee will study various proposals and will develop activities to promote health.

Mental health care

Besides regular health management, we take an active interest in mental health issues, a subject that has become a focus of social concern in recent years. We have implemented a “return to the workplace support program,” which includes measures to facilitate rehabilitation and enable a smooth transition for returning employees. Also, to make counseling more accessible, we have established mental health consultation centers staffed by specialists at major locations, and we hold periodic seminars for employees concerning mental health.

TDK will continue to conduct stress checks and mental health related training programs for its employees.

As of fiscal 2016, we are conducting stress checks to assess stress levels of individual employees and to prevent mental health issues before they have a chance to happen. Through stress checks and various kinds of training, the goal is to foster a dynamic workplace where each and every employee is able to deal effectively with stress.

Sustainability | Society

Social Contribution Activities

Our Approach (Basic Concept of Contributing to Society)	Structure
Academic, Research and Education Activities	Sports, Art and Culture Activities
Environmental Conservation Activities	Social Welfare and Local Community Service Activities
Disaster Area Assistance	

Our Approach (Basic Concept of Contributing to Society)

As a corporate citizen, TDK recognizes the importance of coexisting with the community and, thinking about what we can do for society as a company, promotes various original social contribution activities.

Principle

Based on TDK's corporate motto of "Contribute to culture and industry through creativity," the TDK Group aspires to foster the development of a healthy and prosperous society by implementing various activities in which all TDK employees can feel committed and connected to the community.

Policy

The TDK Group will utilize its various resources (employees, products, capital, information, etc.) to globally implement proactive community activities - both alone and working alongside NPOs and NGOs - that contribute to the betterment of society in the areas of (1) academic, research, and education, (2) sports, art, and culture, (3) environmental conservation, and (4) social welfare and local community service activities.

Structure

In accordance with the above policy, TDK creates and implements plans for social contribution activities in various regions.

Academic, Research and Education Activities

TDK is willing to return the profits of its activities to local communities by utilizing our accumulated product technologies and human resources. Specifically, TDK wishes to offer opportunities for young people who will lead the next generation to acquire a wide range of knowledge, experiences, and skills.

One specific example is the TDK Museum, which reopened in October 2016. The museum introduces the history of TDK's products utilizing magnetic technology and its technologies and also, as a new aspect, its efforts toward the future, the aim being to support the science and technology studies of the young people who will be the leaders of society in the next generation. The museum also continuously conducts electronics workshops.



An electronics workshop

Related link

[TDK Museum](#)

Sports, Art and Culture Activities

TDK strives to be an “exciting company,” capable of providing quality and excitement to stakeholders. TDK provides support in inspirational sports and art activities that uplift people's hearts.

Some specific examples are sponsorship since 2001 of the TDK Orchestra Concerts, performance in Japan of world-renowned orchestras from around the world, as well as Outreach Mini-Concerts and Open Rehearsals for the education and development of elementary and junior high school students and students of music.

Related link

[TDK Orchestra Concert 2018](#)

Environmental Conservation Activities

TDK is engaged in R&D activities to provide products that make people's lives more convenient. But we also work earnestly on various environmental conservation activities to contribute to the symbiosis with the global environment.

One example from plants in the Akita region is The TDK Beech Forest tree-planting event, which has been held every year since 2004. Even after the tree planting the trees are given fertilizer as part of reforestation and beautification activities at various sites.



Fertilizing trees in the TDK Beech Forest

Social Welfare and Local Community Service Activities

TDK conducts its business activities on a global basis. We endeavor to apply our resources in a positive manner and provide help in solving various issues in local communities, in order to realize a better society.

An example in Europe is support making repairs at the Munich Immigration Center as a part of a pilot project for joint volunteer activities. Various activities are undertaken according to the specific needs in each region.



Repair work at the Munich Immigration Center

Disaster Area Assistance

Employees from the TDK Akita Kitakami Plant have participated in volunteer programs to support recovery operations in Iwate Prefecture each year following the 2011 Great East Japan Earthquake.

Investor Relations | Management Policy

Corporate Governance

[TDK Basic Policy on Corporate Governance](#)
[Management and Execution Structure](#)
[Remuneration for Directors and Audit & Supervisory Board Members](#)
[Directors, Audit & Supervisory Board Members and Corporate Officers](#)
[Basic Policy for Internal Control](#)
[Excerpt from Corporate Governance Report \(PDF: 183KB\)](#)

Sustainability | Governance

Corporate Ethics and Compliance

[Basic Policy](#)
[Help Lines](#)
[Spreading Awareness of Corporate Ethics](#)
[Compliance](#)

Basic Policy

The TDK Group bases its corporate ethics and compliance on top management demonstrating leadership in raising awareness among officers and employees and comprehensively ensuring proper action.

To ensure that all personnel are aware of the corporate philosophy, TDK Code of Conduct, and TDK Charter of Corporate Behavior, the chairman of the Business Ethics Committee, who was appointed by the Board of Directors, creates opportunities for direct education and training of Group employees. In addition, the TDK Group conducts group training, E-learning, and other programs every year to inform all Group employees around the world about the fundamentals of corporate ethics.

Global corporate ethics structures centered on the Business Ethics Committee have been established to perform periodic monitoring regarding the status of compliance with corporate ethics, and reports are made to the Board of Directors via the Corporate Ethics Business at the beginning of each quarter regarding the status of compliance.

Related link

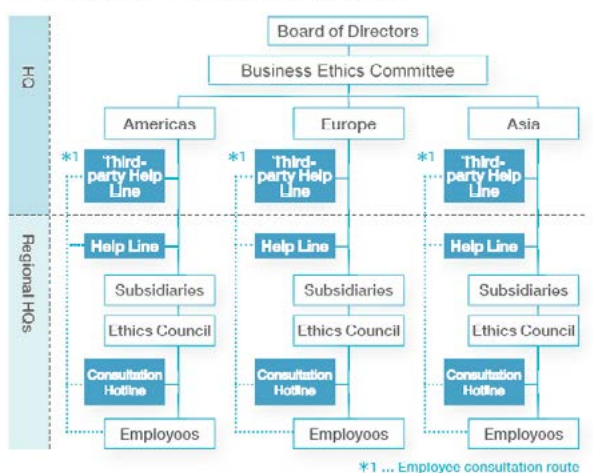
[TDK Code of Conduct](#)

Help Lines

The TDK Group has established structures to enable employees and others to make internal reports and consult regarding issues of corporate ethics through channels other than their regular work chain of command. Each Ethics Council has a consultation hotline and internal helplines have been established on a regional basis for the direct collection of information and opinions relating to corporate ethics and other issues within the Group. In addition to the regular reporting routes within the Group, alternate reporting routes that provide access to outside law firms and other third parties have also been established in the Americas, Europe, and Asia. As a result, employees and others making reports can select the reporting route that they believed to be the most appropriate. The TDK Code of Conduct Program stipulates the protection of informants so that they do not suffer any unfair treatment or disadvantages.

Organization and Operation

TDK's Worldwide Internal Reporting System



(As of November 28, 2018)

Number of Consultations and Reports to Help Lines (Global)

FY 2014	284*
FY 2015	300
FY 2016	192
FY 2017	121
FY 2018	115

* The scope of figures includes the Ethics Councils of affiliates.

Spreading Awareness of Corporate Ethics

TDK provides every TDK Group employee with a copy of the TDK Code of Conduct Handbook, which they can use as a guide for their individual business activities, and also endeavors to spread awareness by, for example, displaying posters.

Also, in order to deepen employees' understanding of corporate ethics, TDK implements training for specific ranks of employees and e-learning for all employees, as well as lectures for management by responsible directors and outside speakers.

During fiscal 2018, corporate ethics e-learning programs were arranged for 98% of all TDK Group employees.

Compliance

The TDK Group has appointed a Global Chief Compliance Officer and Regional Chief Compliance Officers for each of the five regions worldwide and established the Legal & Compliance HQ directly under the President.

We are taking measures to further reinforce structures so that all Group personnel can act in strict compliance with shared global norms while working to develop an honest, fair, and transparent corporate culture and respond to the trust and expectations of customers in society.

We have identified group compliance risks that are believed to be significant from the perspective of legal risk management. The divisions responsible for the various compliance-related issues that arise confirm the facts, take appropriate action, and report to the Board of Directors in a timely manner. In addition, the relevant divisions cooperate with the Legal & Compliance HQ to analyze the causes and take measures to prevent reoccurrence at each Group company.

Sustainability | Governance

Risk Management

[Structure](#)
[Operational Risks](#)
[Business Continuity Plans \(BCPs\)](#)
[Information Security](#)

Structure

To enhance the risk management system of TDK, the Company has established the four committees (which is chaired by a Corporate Officer appointed by the President) under the direct control of the Executive Committee.

1. Disclosure Committee

The Disclosure Committee deliberates on and examines important corporate information and disclosure materials of the Company that are required for investment decisions by shareholders and investors, to ensure that the Company discloses appropriate information in a comprehensive, accurate, timely and impartial manner, in accordance with various laws and regulations regarding securities transactions and the rules and regulations of the stock exchange on which the Company's shares are listed.

2. ERM* Committee

For the purpose of the company-wide treatment of factors that obstruct the achievement of the business targets and business operations of the Company, the Company has established the ERM Committee, and promotes enterprise risk management.

Corporate regulations, bylaws, guidelines, and departmental guidelines in each department provide for operating rules for specific risks, including legal, financial, and IT-related risks. These risks are managed by managers in charge of the particular areas of operation.

3. Crisis Management Committee

In order to prepare for unexpected situations such as natural disasters, the Company has established the Crisis Management Committee, which developed the Business Continuity Plan (BCP). Accordingly, if such an unexpected situation arises, the Company will assess the situation immediately and respond appropriately.

4. Information Security Committee

In order to appropriately manage important information assets including information provided by customers, the Company has established the Basic Policy on Information Security and the Information Security Committee, and appropriately takes risk-based security measures.

The Company has ensured that a structure for receiving advice in relation to operating business execution effectively is in place through regular confirmation by the Audit & Supervisory Board Members and the internal audit group of the management operations described above. In addition, the Company will seek advice from specialists, including outside legal counsel and other experts, regarding new factors that may hinder TDK as needed.

* ERM (Enterprise Risk Management)

Operational Risks

Related link

[Operational Risks](#)

Business Continuity Plans (BCPs)

TDK has established a crisis management system to ensure the life and safety in times of emergency and prevent secondary disasters. The system is also intended to ensure business continuity. We have set up business continuity plans (BCPs) to deal with large-scale natural disasters, putting in place measures to prevent critical business functions from being interrupted even if a disaster occurs to the maximum degree possible and preparing for situations where those functions are interrupted, so that they can be resumed as quickly as possible.

In high-risk regions of Japan where a major earthquake is likely to cause extensive damage in particular, we work to continually improve business continuity plans by periodically carrying out BCP drills at each of our main businesses and verifying the effectiveness of those plans.

Information Security

Related link

[Information Security](#)

Sustainability | Governance

Information Security

[Our approach](#)
[Structure](#)
[Specific Measures in Fiscal 2018](#)
[Future Activities](#)

Our approach

In order to ensure the continuous improvement of information security, the TDK Group has built a global information security management structure based on its Basic Policy on Information Security and conducts activities accordingly.

Basic Policy on Information Security

General Direction

This Policy shall apply to the TDK Group.

The TDK Group shall work on maintenance and enhancement of the security of information, recognizing that it is indispensable to secure personal information and trade secrets (including information on or received from customers) appropriately, and ensure the correctness and accuracy of financial information as well as business continuity in order for us to make ourselves highly reliable and more satisfactory to our stakeholders. We all shall execute the following six actions as the concrete guidelines of actions.

Action Guidelines

1. Observance of Laws and Regulations

In the handling of information, we shall observe laws and regulations concerning “the prevention of alteration, leakage, unauthorized access, and unlawful use of information”, “requiring reliability of information and correctness in disclosure”, and “protecting personal information”, and “business requirements including terms and conditions of contracts with customers” in the respective countries and regions.

2. Information Security Management System

We shall establish a system to manage and govern information security organically and define its role and responsibility.

3. Implementation of Measures for Risk Management

We shall find out threats and vulnerability in light of confidentiality, completeness and availability, and implement sufficient measures in response to the risks. In addition, we shall make sure to implement the measures for information security with the company regulations set in accordance with this Policy.

4. Provision of Resources

The management shall provide management resources necessary to execute this Policy.

5. Continuous Improvement of Information Security

We all shall endeavor to continue to improve the information security in response to changes in risks arising from transformation in internal and external circumstances.

6. Strict Actions

Should there be a violation of this Policy or the company regulations, the management shall take a strict action in accordance with the Code of Conduct and the Work Rules.

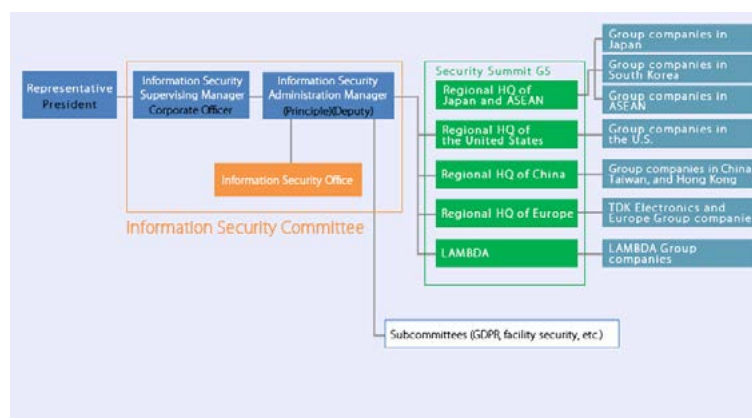
Established July 1, 2005

Revised on April 15, 2016

Structure

Under the Executive Committee, TDK has set up the Information Security Committee, which adopts measures in response to information security risks in the Group as a whole. By establishing deliberative bodies made up of representatives from each region around the world, we are reinforcing global information security governance. Through the Information Security Administration Managers Meeting and other channels, the Information Security Committee endeavors to implement measures for each division.

Information security management organization



As of April 1, 2019

Specific Measures in Fiscal 2018

In fiscal 2018, we focused on countermeasures against increasingly sophisticated cyberattacks and conducted trials worldwide.

Main Measures

- Reinforced countermeasures against cyberattacks on worldwide Group company websites
- Reinforced countermeasures against cyberattacks using detection of unauthorized communications
- Training concerning targeted threat e-mail
- Reinforced governance by establishing global rules regarding standards of the use of cloud services
- Response to the EU's General Data Protection Regulation (GDPR)
- Thorough compilation of measures through global information sharing and administrator meetings



At the global meeting

Future Activities

In order to respond to cyberattacks, which are becoming an increasingly serious threat, TDK will reinforce internal information security countermeasures and strengthen measures regarding cloud services, use of which is increasing, on a global level, including the vulnerability management of PCs and servers and the detection and blockage of illegal communications. In addition, TDK will continue to enhance employee education and training, including training to handle targeted email attacks, thereby responding to risks in the Group as a whole that cannot be fully handled by the system.

Sustainability | How the Public Sees Us

Third-Party Opinion



Toshihiko Fujii
Visiting Professor
Tama University Graduate School

In this year's Sustainability Report, TDK President Shigenao Ishiguro describes how the position of social value in management has evolved. President Ishiguro's aim, as presented in the report, is to **"Advancing the development of a sustainable society and promoting well-being for all people,"** and to achieve this objective, management must use social value as a starting point for all endeavors. This goal is highly laudable. I urge readers to take a look at the illustration in the section on the TDK Group's Sustainability Vision that visually depicts the Value Creation 2020 Medium-Term Plan. It shows social value as the point of origin, followed by commercial value to execute growth strategy and asset value to enhance asset efficiency, which then leads back to social value. Management grounded in such thinking will inevitably take a different course of action as compared to traditional management which places these three values side by side. Additionally, TDK's new establishment of the Sustainability Promotion HQ directly under the president signals an important shift in organizational structure.

TDK's contributions to the achievement of Sustainable Development Goals (SDGs) are brought to the forefront in this year's report, and the clarification of priority goals underscores TDK's determination to implement socially-driven sustainability management. Through easily-understood and well-crafted videos, the report illustrates how TDK's technologies and products for seven key applications directly contribute to the achievement of SDGs. This section is another exemplary feature of this year's report.

Moving on, readers will gain important context on TDK's management philosophy via the section on the pursuit of zero-defect product quality. The core message is that in addition to addressing social issues, TDK must continue to solidify its leadership in monozukuri (manufacturing excellence) - in other words, quality. I interpreted this to be a statement of TDK's determination to advance management goals based on social issues, while remaining grounded in the quest for excellence.

One of TDK's well-received initiatives is its international effort to promote global workforce development. In this respect, TDK is clearly ahead of many other Japanese companies. Its Territorial Career Development Program discovers skilled workers around the world who demonstrate leadership potential. I look forward to seeing TDK's further evolution under the stewardship of these capable individuals. The employees who will comprise TDK's future workforce have a strong understanding of the need for management based on social issues.

The report also delivers an update on the progress toward social and environmental considerations in the supply chain and shifts that will bring production into harmony with the global environment. Regarding the former, TDK has compiled a code of conduct for suppliers; regarding the latter, information is disclosed for the first time on the environmental impact from a lifecycle perspective.

Although the report speaks to many positive developments, some issues remain which merit further attention.

First, with respect to the previously mentioned seven specific contributions, the narrative focuses eloquently on the contribution of TDK products to the SDGs. However, social value is the endpoint of the narrative. It must be made the origin as well. Of course, this is easier said than done, but the magnitude of this challenge is precisely why President Ishiguro has expressed so much determination. Going forward, TDK is tasked with developing technologies, products, and business models that place social value at both the starting line and the finish line.

Furthermore, I would like to mention two separate issues. First, social and environmental considerations in the supply chain are definitely not an effort that comes to an end. There will continually be room for progress, including the improvement of transparency through the disclosure of supplier information and TDK's response to suppliers who do not comply with the code of conduct. Second, to achieve harmony with the global environment, TDK will need to set environmental goals from a lifecycle perspective and disclose information concerning the completion of those goals.

I enjoyed reading the TDK Group's Sustainability Report 2019 and appreciate the opportunity to provide my opinion. Clearly, much progress has been made from the previous year's CSR Report. I look forward to reading next year's report and anticipate even greater advancement, following continued efforts by TDK to address the issues I have raised.

Sustainability | How the Public Sees Us

Awards Received in Fiscal 2018

[TDK Receives Corporate Governance of the Year® 2018 "Winner Company" Prize](#)
[TDK Receives a Prize for Excellence in 21st Nikkei Annual Report Awards 2018](#)
[TDK named a Clarivate Analytics Derwent Top 100 Global Innovator 2018-19](#)
[TDK's Solid-State Rechargeable Battery 'CeraCharge™' wins 2018 Nikkei Superior Products and Services Awards for Excellence](#)
[Social Recognition from Investors](#)

TDK Receives Corporate Governance of the Year® 2018 "Winner Company" Prize

TDK has been selected for honorable mention for the Corporate Governance of the Year® 2018 Prize offered by the Japan Association of Corporate Directors (JACD).

The awards go to companies that have achieved and maintained medium and long-term profitability by implementing good corporate governance with the ultimate goal of revitalizing the Japanese economy, since 2015. TDK was selected in recognition of its efforts as a company that maintains an awareness of corporate governance in its management activities, and achieves sound growth in the medium to long-term while at the same time implementing various reforms.

Specifically, in addition to focusing on business performance indicators such as ROE, ROA and market capitalization, TDK's efforts in developing its governance system include issues that TDK has worked on for many years such as: separation of the Chairman of the Board of Directors from executive functions, the ratio of independent directors, and voluntary establishment of a nomination advisory committee and compensation advisory committee. TDK will continue improving its corporate governance on an ongoing basis to achieve sustainable growth and boost its corporate value over the medium and long term.



TDK Receives a Prize for Excellence in 21st Nikkei Annual Report Awards 2018

TDK received a prize for excellence in the 21st Nikkei Annual Report Awards 2018. The Nikkei Annual Report Awards have been presented for outstanding corporate annual reports every year since 1998 with the aim of enhancing the quality of content and facilitating widespread dissemination. In 2018 entries were received from 121 companies. A panel of judges, including representatives from institutional investors, selected the winners after rigorous screening in 10 categories, including top management messages, its roadmap and measures for improving corporate value over the medium and long term, and overall accomplishment.

The annual report is an influential source of information for analyzing the company and making investment decisions, and in recent years it has come to cover such content as financial data, business domains, corporate strategy, governance, and corporate social responsibility. It is used by a wide range of stakeholders, from institutional investors to individual investors both in Japan and overseas. In association with the recent winning of the prize, TDK's annual report was highly regarded for its clear descriptions of the process of creating corporate value and the policy behind that, as well as for an outstanding interview in TDK from Outside Perspectives, which was seen as portraying the outside directors' determination to engage seriously in corporate management and as demonstrating TDK's sound corporate governance.



TDK named a Clarivate Analytics Derwent Top 100 Global Innovator 2018-19

TDK has been selected as one of the Derwent Top 100 Global Innovators 2018-19 by Clarivate Analytics.

To determine the world's top 100 most innovative companies and research organizations, Clarivate Analytics analyzes intellectual property and patent trends based on patent data it has obtained, using more extensive criteria than simply patent filings. Its four primary criteria are: overall patent volume (a minimum of 100 patents must have been granted over the most recent five-year period); a successful patent-application-to-grant ratio; global patent protection of the portfolio, especially by Chinese, European, Japanese and U.S. patent offices; and the number of citations by other organizations as evidence of patent influence. TDK received the ranking as a global innovator for significant improvements particularly in the areas of success and globalization.

2018-19

**DERWENT
TOP 100
GLOBAL
INNOVATOR**

 **Clarivate
Analytics**



TDK's Solid-State Rechargeable Battery 'CeraCharge™' wins 2018 Nikkei Superior Products and Services Awards for Excellence

TDK CeraCharge™ has won the 2018 Nikkei Superior Products and Services Awards for Excellence by Nihon Keizai Shimbun, Inc.

Now in its 37th year, the Nikkei Superior Products and Services Awards honor outstanding new products and services covered during the year in Nikkei, Inc. publications such as Nihon Keizai Shimbun, Nikkei Business Daily, Nikkei Marketing Journal, Nikkei Veritas, Nikkei Online Edition, and Nikkei Asian Review. This year's winners were selected from more than 20,000 products and services.

TDK CeraCharge™ is the world's first all-ceramic solid-state battery that is a rechargeable SMD (Surface Mount Device). CeraCharge™ doesn't rely on liquid electrolyte commonly used for batteries. Instead, it charges and discharges through a ceramic solid electrolyte to give a high level of safety and eliminate the potential risk of fire and explosion. CeraCharge™ is a product that utilizes advanced copper electrode technology, which TDK has developed over a number of years; and a multilayer technology similar to that used in numerous passive components. It can be handled in the same way as chip-type passive components when mounting on boards, helping to reduce the production cost of electronic devices.

Nikkei award judges recognized TDK's solid-state battery for its ability to be charged and discharged from several dozens to up to 1,000 times with no significant loss in performance. The product can be used for a long period of time without maintenance. Finally, Nikkei judges praised TDK's multilayer technology that makes CeraCharge™ suitable for mass production.



Social Recognition from Investors

Socially responsible investment (SRI) has become a growing trend in both North America and Europe. For SRI, investors are concerned not only with the financial aspect of a company, but also its efforts to protect the environment and address other social concerns. TDK is included for example in the Excellence Index of the Ethibel Investment Register published by Forum Ethibel, a Belgian organization for SRI promotion, and the ECPI index, an internationally recognized index managed by the ECPI Group considering environmental, social, and governance (ESG) factors.

(As of March 31, 2019)



Sustainability | Sustainability Data

A History of TDK's Environmental Activities

Environmental Activity Chronological Table

[1990~](#)
[2000~](#)
[2010~](#)

1993	TDK Environmental Voluntary Plan formulated
	Total elimination of ozone depleting substances*1
1995	Start of ISO 1400 implementation
1996	Start of consolidated control of chemical substances
1997	Safety & Environment Office established
	ISO 14001 certification obtained by Mikumagawa Plant, first in TDK Group
	Introduction of product assessment
1998	ISO 14001 certification obtained by all TDK Parent Company manufacturing and R&D facilities
	Total elimination of trichloroethylene and tetrachloroethylene
1999	Green procurement starts (Japan sites)
	Lead-free project inaugurated
	Regular release of Environmental Report begins
2000	Zero Emission Project launched
	ISO 14001 certification of all manufacturing and R&D facilities of TDK Group in Japan completed
	In-house environmental newsletter "TDK ECOPLUS" launched
2001	Feb. Incinerators eliminated at manufacturing plants in Japan
	Mar. TDK Green Purchasing Guide (Office Edition) published
	Mar. Technical development completed for lead-free soldering
	Apr. Trial introduction of environmental accounting started (Japan sites)
2002	Apr. Mass production technology for electronic components compatible with lead-free solder developed
	Apr. EMS Integration Preparation Committee inaugurated (committee name changed to EMS Integration Promotion Committee in April 2003)
	May Product Environment Committee inaugurated
	Oct. Fundamental environmental plan, TDK Environmental Action 2010, drafted (started from April 2003)
2003	Jul. TDK Chemical Substance Contained for Product Standards established
	Sep. Safety & Environment Office obtains ISO 14001 certification (as a first step toward company-wide EMS integration)
	Oct. Zero emissions achieved at all TDK sites in Japan
2004	Oct. Environmental risk management activities (for soil contamination) started at all manufacturing facilities in Japan
	Nov. Environmental Product Quality Management System established and implemented
	Dec. All general-purpose electronic components conform to RoHS Directive

2005	Jul. Environmental risk management activities (for VOC) started at all manufacturing facilities in Japan
	Dec. Fundamental environmental plan, TDK Environmental Action 2015, drafted (started from April 2006)
2006	Feb. 300-kW solar power generation system introduced at Kofu Plant (selected for field testing of solar power technologies by NEDO*2)
	Mar. EMS integration for all manufacturing facilities in Japan completed
	Apr. Quality Management System (QMS) and Environmental Product Quality Management System integrated
2007	Jan. Chinese headquarters obtained ISO14001 certification (first step toward integration of EMS in China into company-wide system)
	Mar. Zero emissions achieved for manufacturing facilities of all overseas subsidiaries
	May Participated in Japan Article Management Promotion (JAMP) consortium as a promoter
2008	Feb. Received Grand Prize in 17th "Global Environment Awards"
	May First Global Warming Countermeasure Summit held (energy-saving technology work groups launched)
	Sep. Start of environment-conscious product certification system (Eco Love products)
	Dec. Participation in CO ₂ emissions trading scheme in Japan
2009	Sep. TDK establishes Biodiversity Action Agenda
	Dec. The installation of the solar power system at the Kofu Plant wins a Ministry of Economy, Trade and Industry 14th New Energy Award Review Board Chair's Prize
2010	Mar. TDK discloses chemical substance information on the "JAMP-GP chemical substances in products information system"
	Mar. TDK-Lambda Corporation concluded a comprehensive "corporate hometown building agreement" with Shinano-machi in Nagano Prefecture and the Mountain Village Revitalization Support Center
	Sep. TDK became the first electronic components maker to receive a special award under the environmental assessment scheme of the Development Bank of Japan
2011	Feb. Fundamental environmental TDK Environment Action 2020, drafted (started from April 2011)
2012	Sep. TDK receives special award under environmental assessment scheme of Development Bank of Japan for second time in a row
2013	Oct. Akita Prefecture Mount Chokai beech forest planting drive enters 10th year
	Dec. ISO 14001 and OHSAS 18001 certifications in Japan changed to Bureau Veritas Certification, to unify certifications of domestic sites
2014	Apr. TDK Corporation establishes a special agreement ("Corporate-Regional Collaboration Agreement") together with the municipality of Shinanomachi, Nagano Prefecture, and the Mountain Village Revitalization. Center (three parties).
	Dec. U.S. ISO14001 certifying organization changed to Bureau Veritas Certification; process integrated partially with Japanese domestic certification
2015	Mar. Achieved the fundamental environmental plan "TDK Environmental Action 2020" goal of a one million-ton environmental contributions
2016	Mar. TDK Environment, Safety and Health Action 2025 formulated as basic environmental plan in accordance with the TDK Environmental Vision 2035 (implemented from April 2016)
	Apr. "Guidelines for Calculation of Product Contributions" published with the aim of enhancing the reliability of product contribution calculations
	Apr. Biomass boiler at Honjo Plant of TDK-MCC Corporation taken into operation. Use of biomass fuel is a first for the TDK Group.

2017	Jul. Raising of Japanese rice fish (<i>Oryzias latipes</i>), an endangered species, begun at TDK Akita's Kitakami Plant as a biodiversity protection activity
	Aug. Received special award in the Development Bank of Japan's environmental ranking for the third consecutive year.
	Total abolition of high-concentration PCB equipment in Japan
2018	Apr. Revision of the TDK Environmental Charter (fifth edition)
	Oct. Clean energy purchasing promoted primarily at European business sites of TDK Electronics AG
2019	May TDK expressed support for the recommendations of the TCFD (Task Force on Climate-related Financial Disclosures)

*1: Limited to ozone-depleting substances regulated by the 1993 Ozone Layer Protection Law (except for air conditioning equipment which is outside the scope of the law).

*2:NEDO: New Energy and Industrial Technology Development Organization

Sustainability | Sustainability Data

ISO14001/OHSAS18001(ISO45001) Certification

[ISO14001](#)
[OHSAS18001 \(ISO45001\)](#)

ISO14001

Facility	Country	Certificate Number	Examined by
TDK Corp. Head Office Safety & Environment Group of Sustainability Promotion HQ Technical Center Mikumagawa Plant Asama Techno Factory Kofu Plant Narita Plant Shizuoka Plant Inakura Plant Nikaho Plant North Site Nikaho Plant South Site Honjo Plant West Site TDK Akita Corporation Inakura Plant Nikaho Plant North Site Nikaho Plant South Site Honjo Plant West Site Kitakami Plant Ouchi Plant Konoura Plant Iwaki Plant Honjo Plant East Site TDK Shonai Corp. Tsuruoka Plant Sakata Plant Iida Plant Tsuruoka East Plant TDK-Lambda Corp. Headquarters office Nagaoka Technical Center TDK Service Corp. Head Office, Yawata Sales Office Tokyo Sales Office TDK Kofu Corp	Japan	3994702	BV
TDK Precision Tool Corp.	Japan	05672-01	Intertek
TDK USA Corporation TDK Components USA., Inc. TDK Ferrites Corporation Headway Technology, Inc. TDK-Lambda Americas Inc.	U.S.A.	US012110	BV

TDK China Co., Ltd. TDK (Suzhou) Co., Ltd TDK Dalian Corporation Qingdao TDK Electronics Co., Ltd. TDK Xiamen Co., Ltd. Guangdong TDK Rising Rare Earth High Technology Material	P.R. China	CNBJ312477-UK	BV
TDK Dongguan Technology Co., Ltd. Dongguan Changan Huanan Electronics Factory	P.R. China	02116E10334R4L-1 02116E10334R4L	CCCI
SAE Magnetics (H.K.) Ltd. Dongguan Plant Chang An Plant SAE Components Chang An Plant	P.R. China	02117E10966R6L 02117E10017R4L 02117E10017R4L-1	CCCI CCCI
SAE Technologies Development (Dongguan) Co., Ltd.	P.R. China	U006617E0289R6L	CCCI
Amperex Technology Ltd.	P.R. China	CN09/31828	SGS
Acrathon Precision Technologies (HK) Ltd.	P.R. China	02118E10334R3M	CCCI
Wuxi TDK-Lambda Electronics Co., Ltd.	P.R. China	02116E10492R3M	CCCI
TDK Hong Kong Co., Ltd.	Hong Kong	12 104 40080 TMS	TUV
TDK Taiwan Corporation	Taiwan	20003153 UM	DQS
InvenSense Taiwan Co., Ltd.	Taiwan	TW17/00861	SGS
TDK Korea Corporation	Korea	20BK00279-UK	BV
TDK Philippines Corporation	Philippines	PH16/1410	SGS
TDK (Thailand) Co., Ltd.	Thailand	488005 UM	DQS
Magnecomp Precision Technology Public Co., Ltd. Rojana Factory Wangnoi Factory	Thailand	25884/A/0002/UK/En 25884/G/0001/UK/En	URS URS
Hutchinson Technology Operations (Thailand) Co., LTD.	Thailand	81791/C/0001/UK/En	URS
TDK (Malaysia) Sdn. Bhd.	Malaysia	01 104 1535520	TUV
TDK-Lambda Malaysia Sdn. Bhd Senai Factory Kuantan Factory	Malaysia	01 104 1735507	TUV
TDK-Lambda UK Ltd.	U.K.	EMS 518156	BSI
TDK-Lambda Ltd.	Israel	87520	IQnet
TDK Electronics AG	Germany	91372-2011-AE-GER-DakKS	DNV

OHSAS18001 (ISO45001)

Facility	Country	Certificate Number	Examined by
TDK Corp. Safety & Environment Group of Sustainability Promotion HQ Mikumagawa Plant Kofu Plant Narita Plant Shizuoka Plant Inakura Plant Nikaho Plant North Site Nikaho Plant South Site Honjo Plant West Site TDK Akita Corporation Inakura Plant Nikaho Plant North Site Nikaho Plant South Site Honjo Plant West Site Kitakami Plant Ouchi Plant Konoura Plant Iwaki Plant Honjo Plant East Site TDK Shonai Corp. Tsuruoka Plant Sakata Plant Iida Plant Tsuruoka East Plant TDK Kofu Corp.	Japan	IND17.3445U	BV
TDK China Co., Ltd. TDK (Suzhou) Co., Ltd. TDK Dalian Corporation Qingdao TDK Electronics Co., Ltd. TDK Xiamen Co., Ltd.	P.R. China	CNBJ312478-UK	BV
SAE Magnetics (H.K.) Ltd. Dongguan Plant Chang An Plant	P.R. China	02117S10810R3M 02119S10030R4L	CCCI CCCI
Amperex Technology Ltd.*	P.R. China	CN18/30212	SGS
TDK Dongguan Technology Co., Ltd. Dongguan Changan Huanan Electronics Factory	P.R. China	02118S10383R1L-1 02118S10383R1L	CCCI
TDK Taiwan Corporation	Taiwan	20003153 BSOH	DQS
InvenSense Taiwan Co., Ltd.	Taiwan	TW17/00862	SGS
TDK Korea Corporation	Korea	IND17.6210U/HS	BV
TDK Philippines Corporation	Philippine	CH16/1094.00	SGS
TDK (Thailand) Co., Ltd.	Thailand	488005 BSOH	DQS
Magnecomp Precision Technology Public Co., Ltd. Rojana Plant Wangnoi Plant	Thailand	25884/C/0002/UK/En 25884/I/0001/UE/En	URS URS

Hutchinson Technology Operations (Thailand) Co., LTD.	Thailand	81791/D/0001/UK/En	URS
TDK (Malaysia) Sdn. Bhd.	Malaysia	01 113 117285	TUV
TDK-Lambda EMEA	UK	OHS609627	BSI
TDK-Lambda Ltd.	Israel	51749	IQNet

* Facilities with ISO 45001 certification

Sustainability | Sustainability Data

Environmental Performance Data

[Environmental Performance Data](#)
[CO₂ Emissions in Value Chain \(FY 2018\)](#)

Environmental Performance Data

Japan

		Unit	FY2014	FY2015	FY2016	FY2017	FY2018
Energy (Manufacturing)	CO ₂ emissions	t-CO ₂	302,136	339,428	328,428	349,181	344,864
Energy (Logistics)	CO ₂ emissions	t-CO ₂	4,999	4,946	5,093	5,564	4,838
Water	Water intake	thousand m ³	3,375	3,235	3,252	3,502	3,425
Resources	Resource consumption	t	39,612	38,380	36,581	34,661	37,454
Atmosphere	PRTR substance emissions	t	77	80	100	76	85
	SO _x emissions	t	5	3	2	2	2
	NO _x emissions	t	42	38	43	42	17
	Dust emissions	t	2	1	3	2	3
Water quality	Waste water discharged	thousand m ³	2,352	2,111	2,148	2,305	2,226
Waste	Total waste	t	24,045	24,775	26,827	26,775	26,519
	Waste outsourced for recycling	t	21,359	22,074	24,191	24,158	24,359
	Final disposal	t	0	0	0	0	0
Regulatory Compliance and Accidents	No. of statutory level excesses or accidents	No.	0	0	0	0	0
	No. of statutory level excesses or accidents (>USD\$10,000)		0	0	0	0	0
	No. of fines/penalties related to the above (>USD\$10,000)	USD	0	0	0	0	0

Outside Japan

		Unit	FY2014	FY2015	FY2016	FY2017	FY2018
Energy (Manufacturing)	CO ₂ emissions	t-CO ₂	966,950	1,134,691	1,134,969	1,297,915	1,324,869
Water	Water intake	thousand m ³	10,279	11,060	10,449	13,455	13,279
Resource consumption	Resource consumption	t	174,492	167,024	174,364	224,570	255,336
Waste	Total waste	t	46,484	53,712	51,088	65,639	65,619
	Waste outsourced for recycling	t	37,391	42,671	42,347	53,981	53,769
	Waste outsourced for recycling	t	0	0	0	0	0
Regulatory Compliance and Accidents	No. of statutory level excesses or accidents	No.	1	1	0	0	0
	No. of statutory level excesses or accidents (>USD\$10,000)		0	0	0	0	0
	No. of fines/penalties related to the above (>USD\$10,000)	USD	0	0	0	0	0

CO₂ Emissions in Value Chain (FY 2018)

CO₂ Emissions by Category and Scope

Category		Outline	CO ₂ emissions t-CO ₂
Scope 1		Production	120,978
Scope 2		Production	1,548,755
Scope 3	1	Purchased goods & services	7,964,779
	2	Capital goods	626,937
	3	Fuel- and energy-related activities	701,930
	4	Upstream transportation & distribution	277,621
	5	Waste generated in operations	8,971
	6	Business travel	52,248
	7	Employee commuting	8,444
	8	Upstream leased assets	Not applicable
	9	Downstream transportation & distribution	Not applicable
	10	Processing of sold products	Not applicable
	11	Use of sold products	12,521,378
	12	End-of-life treatment of sold products	Not applicable
	13	Downstream leased assets	Not applicable
	14	Franchises	Not applicable
	15	Investment	Not applicable

Methods of Calculating CO₂ Emissions in Scope 3

Category	Outline	Calculation method
1	Purchased goods & services	Products purchased in the fiscal year concerned multiplied by the emission intensity for each purchase price. Regarding materials, the purchase price of the main constituent materials in each product (excluding semifinished products) multiplied by the emission intensity.
2	Capital goods	The price of equipment and other capital goods acquired in the fiscal year concerned multiplied by the emission intensity for each investment amount.
3	Fuel- and energy-related activities	Calculated according to emissions in the extraction, production, and transportation of purchased fuel and fuel used when purchased electricity is generated. Fuel: Each fuel purchased in the fiscal year concerned multiplied by the emission intensity. Electricity: Purchased electricity quantity multiplied by the emission intensity.
4	Upstream transportation & distribution	Calculated according to emissions involved in the procurement of purchased products and services and emissions involved in the transportation of manufactured products. Regarding purchased products and services, each of the same items as in Category 1 multiplied by the emission intensity involved in procurement. Regarding manufactured products, expenses involved in shipment multiplied by the emission intensity.
5	Waste generated in operations	Regarding waste at manufacturing sites excluding valuables, financial value of the waste multiplied by the emission intensity.
6	Business travel	Business travel expenditure is calculated by multiplying expenses involved in employee travel by the domestic employee commuting/business travel expense ratio. Emissions are then calculated by multiplying this business travel expenditure by the emission intensity taking account of the content of business travel.
7	Employee commuting	Commuting expenditure is calculated by multiplying expenses involved in employee travel by the domestic employee commuting/business travel expense ratio. Emissions are then calculated by multiplying this commuting expenditure by the emission intensity assumed from the means of commuting.
8	Upstream leased assets	Not applicable
9	Downstream transportation & distribution	Not applicable
10	Processing of sold products	Not applicable
11	Use of sold products	Electricity consumed by TDK products (components) multiplied by the lifelong operating time of set items contained in the product, conversion coefficient, and quantity of TDK products (components) sold.
12	End-of-life treatment of sold products	Not applicable
13	Downstream leased assets	Not applicable
14	Franchises	Not applicable
15	Investment	Not applicable

Sustainability | Sustainability Data

Third-Party Review of Environmental Performance Data

In order to improve the objectivity of environmental performance data, the following items were subject to a third-party review by SGS Japan Inc.

- Calculation method for CO₂ emissions from production activities
- Calculation method for reduction of CO₂ emissions through products



Review Confirmation Report (Summarized Version)

Purpose of the Review

SGS Japan Inc. was commissioned by TDK Corporation (hereinafter referred to as "the Organization") to review the validity of "The Guideline for Assessing Product Contribution on Avoided Greenhouse Gas Emissions" issued on Mar. 23, 2016 (hereinafter referred to as "the Guideline") and the Greenhouse Gas (GHG) Emissions Calculation Method 2015.

The objective of this work is to check the validity of the Guideline and the Calculation Method, and the verification of the accuracy of the data was not included.

Procedures Implemented during the Review

The following processes were implemented in this activity:

- Preliminary review of the report: We implemented a preliminary review to verify that the calculation method stated in the Guideline did not contain any issues with lack of validity, and extracted some issues needed to be confirmed.
- Interviews and review of materials: We had interviews on the business outline and calculation details at TDK Corporation Technical Center, as well as reviews of a part of the source materials.

Reference standard: ISO14064-1 : 2006, ISO14064-2 : 2006, ISO14064-3 : 2006, IEC TR 62726:2014, Guidance on Calculating GHG Emission Reduction Contributions of Electronic Components (published by JEITA on Jan. 2016)

Overall Consideration

Within the scope of the procedures implemented, nothing has come to our attention that caused us to judge that the Guideline and the Greenhouse Gas (GHG) Emissions Calculation Method 2015 contain any significant issues with lack of validity.

May.16, 2016
SGS Japan Inc.

Sustainability | Sustainability Data

Third-Party Verification

TDK calculates direct GHG emissions (Scope 1), indirect GHG emissions from energy sources (Scope 2), and other indirect GHG emissions (Scope 3), and undergoes a third-party verification by SGS Japan Inc.

10 July 2019
Statement No : SGS19/020

Verification Statement

Mr. Shigenao Ishiguro
President & CEO
TDK Corporation

Objective
SGS Japan Inc. (hereinafter referred to as "SGS") was commissioned by TDK Corporation (hereinafter referred to as "the Organization") to conduct independent verification based on Criteria of Verification (ISO14064-3: 2006 and the SGS verification protocol) regarding GHG emissions calculated by the Organization on the scope of verification (hereinafter referred to as "the GHG assertion"). The objective of this verification is to confirm that the GHG assertion in the Organization's applicable scope has been correctly calculated and reported in the GHG assertion in conformance with the criteria, and to express our views as a third party.

Scope
The scope of verification is limited to the GHG assertion at 26 domestic sites and 28 overseas sites of the Organization. GHG emissions included in the GHG assertion are Scope 1 and 2: energy-related CO₂ emissions and energy consumption, excluding the vehicles which run outside of the sites, and Scope 3: category 1, 2, 6, 7 and 11. The period subject to report is from 1 April 2018 to 31 March 2019.

Procedure of Verification
The GHG assertion was verified in accordance with Criteria of Verification, and the following processes were implemented at a limited level of assurance:

- Verification of the calculation system: Interviews on the measurement, tabulation, calculation and reporting methods employed by the Organization as well as review of related documents and records
- Verification of the GHG assertion: On-site verification and review of vouchers at the Shizuoka plant and TDK Akita Corporation Kitakami plant, and analytical procedures and interviews for other sites in the scope of verification carried out at the Technical Center

The criteria for this review are based on GHG Emissions Calculation and Reporting Manual Ver. 4.3, the procedure specified by the Organization, Basic Guidelines on Accounting for Greenhouse Gas Emissions throughout the Supply Chain, Ver. 2.3, JEITA guidelines, and the Embodied Energy and Emission Intensity Data for Japan Using Input-Output Tables.

Conclusion
Within the scope of the verification activities employing the methodologies mentioned above, nothing has come to our attention that caused us to believe that the Organization's assertion (Scope1:80,045 t-CO₂, Scope2: 1,118,527 t-CO₂, Scope3: 21,173,786 t-CO₂) was not calculated and reported in conformance with the criteria. SGS Japan Inc. affirms our independence from the organization, being free from bias and conflicts of interest with the Organization.

For and on behalf of SGS Japan Inc
Senior Executive & Business Manager
Certification and Business Enhancement

Yuji Takeuchi

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Cost of Environmental Protection

Environmental Accounting (Japan)

TDK has historically monitored both the cost of its environmental protection efforts and the burden its activities place on the environment. In FY 2001, to clarify the relationship between burden and cost, and to promote more effective environmental measures, TDK introduced environmental accounting for all of its facilities in Japan.

A summary of FY 2018 results is given below.

Category	Environmental costs		Economic effects	Positive environmental impact
	Total investment (unit: thousand yen)	Total environmental conservation, maintenance and management costs (unit: thousand yen)	Amount of reduction achieved due to environmental conservation activities (unit: thousand yen)	Improvement in environmental burden due to environmental conservation activities, observance of laws/regulations and other results
1. In-plant area costs				
Pollution prevention (Regulatory controls)	656,149	398,680		- Complaints regarding vibrations/noise/odor: 0
Global environmental protection	961,109	220,168	- Electricity and fuel savings: 71,654	- CO ₂ emissions reduction: 2,425t-CO ₂
Resource recycling	69,582	646,730	- Materials usage savings: 67,650 - Service water usage savings: 439 - Profit from sale of valuable materials: 598,157	- Materials usage reduction: 2,327t - Service water use reduction: 55,335m ³ - Volume of valuable materials sold: 9,084t - Company-external recycling volume: 15,143t
Risk management	21,225	17,042		- PRTR controlled substances emissions: 137t - Soil contamination risk countermeasures taken: 0
2. Upstream and downstream costs	0	0		
3. Cost of management activities	0	7,203		
4. Cost of R&D	0	0		- Environment-conscious products research/ development projects: 24
5. Cost of community activities	0	2,092		- Trees planted outside of company premises: 1,466 - Cumulative total of staff taking part in volunteer activities: 3,046
6. Cost of environmental damages	0	3,309		- Repair/restoration actions (incurring costs): 0
Total	1,708,065	1,295,224	737,900	

Note 1: The investment amount for the fiscal year is the amount paid in FY 2018

Note 2: Equipment depreciation costs (as defined by law) are included as part of environmental conservation, maintenance, and management costs, but personnel costs are not included as they are determined by the actual number of staff in any given year.

Note 3: Only the actual impact is addressed. Hypothetical impacts (risk-avoidance impact or presumed impact) are not included.

FY 2018 Totalled Results

- Environment-related capital investment amounts rose on the previous year from ¥965 million to ¥1,708 million.
- Environmental conservation maintenance costs decreased on the previous year from ¥1,308 million to ¥1,295 million.
- The economic effects of environmental conservation activities decreased from ¥953 million in the previous fiscal year to ¥737 million

Sustainability | Sustainability Data

Environmental Performance Data by Site

Environmental Performance Data by Site

Plant name	Energy			CO ₂ consumption t-CO ₂	Water consumption :thousand m ³	Waste	
	Electricity use (Purchased)	Fuel use	Total waste			Outsourced recycling	
	MWh / t-CO ₂	GJ / t-CO ₂	:t			:t	
Japan							
TDK Corporation							
Chokai Plant	4,659 / 2,553	0 / 0	2,553	5	634	634	
Inakura Plant	23,197 / 12,711	28,689 / 1,916	14,628	119	1,327	1,327	
Nikaho Plant North Site	21,411 / 11,733	54,948 / 2,992	14,725	204	2,069	2,069	
Nikaho Plant South Site	10,926 / 5,987	5,452 / 366	6,353	19	117	117	
Narita Plant	62,757 / 29,747	4,630 / 273	30,020	167	925	918	
Kofu Plant ^{*1}	33,031 / 15,503	52,812 / 2,615	18,118	554	854	854	
Chikumagawa Techno Factory	4,161 / 1,997	14,595 / 722	2,719	8	66	66	
Asama Techno Factory	37,109 / 17,812	29,081 / 1,454	19,266	148	275	275	
Shizuoka Plant	46,452 / 22,297	74,311 / 3,766	26,064	124	4,000	1,864	
Mikumagawa Plant	14,459 / 6,984	74,059 / 3,673	10,656	568	1,200	1,200	
TDK Akita Corporation							
Honjo Plant West Site	106,105 / 58,145	113,178 / 5,727	63,872	493	5,851	5,851	
Honjo Plant East Site	20,372 / 11,164	45,473 / 2,301	13,465	29	117	115	
Kitakami Plant	91,384 / 50,079	101,101 / 6,750	56,828	478	5,139	5,139	
Ouchi Plant	35,764 / 19,599	51,148 / 3,074	22,673	79	598	589	
Konoura Plant	11,882 / 6,512	27,407 / 1,859	8,370	54	193	190	
Iwaki Plant	2,759 / 1,512	2,973 / 202	1,714	56	230	230	
Yajima Plant	23 / 12	1 / 0	12	0.03	62	62	
TDK Shonai Corporation							
Tsuruoka Plant	9,568 / 5,243	2,108 / 143	5,386	9	271	271	
Sakata Plant	18,516 / 10,147	8,845 / 600	10,747	180	826	826	
Iida Plant	5,163 / 2,478	0 / 0	2,478	2	196	196	
Tsuruoka East Plant	5,411 / 2,965	19,541 / 989	3,954	76	232	232	
TDK-Lambda Corporation ^{*2}	3,112 / 1,705	68 / 5	1,710	5	66	66	
TDK Precision Tool Corporation	663 / 314	2 / 0	315	0	7	7	
(Development and office sectors)	13,955 / 6,651	30,906 / 1,586	8,236	50	1,138	1,136	
China Area							
TDK Dalian Corporation	41,436 / 30,414	172 / 12	30,426	161	378	338	
Qingdao TDK Electronics Co., Ltd.	9,541 / 7,003	452 / 27	7,030	33	58	58	
TDK (Suzhou) Co., Ltd.	4,000 / 2,936	0 / 0	2,936	6	244	230	
TDK Xiamen Co., Ltd.	112,720 / 82,736	77,979 / 3,969	86,705	656	2,517	2,157	
TDK Taiwan Corporation	17,001 / 8,993	928 / 47	9,041	87	231	231	
SAE Magnetics (H.K.) Ltd.	202,574 / 148,373	6,677 / 458	148,831	1,739	2,117	2,117	
Amperex Technology Ltd.	714,359 / 516,243	288,880 / 13,545	529,788	2,685	26,736	22,035	
Acrathon Precision Technologies (HK) Ltd.	6,624 / 4,862	0 / 0	4,862	85	493	276	
Wuxi TDK-Lambda Electronics Co.,Ltd.	2,705 / 1,985	0 / 0	1,985	8	70	70	
TDK Dongguan Technology Co., Ltd.	27,626 / 20,277	58,643 / 2,990	23,267	153	1,834	1,834	
Guangdong TDK Rising Rare Earth High Technology ^{*3}	4,625 / 3,395	0 / 0	3,395	17	112	112	
Asia Area							
TDK Korea Corporation	15,555 / 8,400	563 / 29	8,428	46	352	293	
TDK Philippines Corporation	32,441 / 11,437	112,438 / 7,688	19,125	430	260	189	
TDK (Malaysia) Sdn. Bhd.	8,974 / 6,021	0 / 0	6,021	30	218	218	
TDK (Thailand) Co., Ltd.	16,000 / 8,000	1,880 / 119	8,119	228	1,113	1,113	
Magnecomp Precision Technology Public Co., Ltd.	61,545 / 30,772	17 / 1	30,773	609	384	384	
TDK-Lambda Malaysia Sdn. Bhd.	7,540 / 5,059	465 / 28	5,087	42	173	159	
Hutchinson Technology Operations (Thailand), Co., Ltd.	27,256 / 13,628	0 / 0	13,628	216	302	302	
InvenSense Taiwan Co.,Ltd. InvenSense Taiwan ^{*3}	8,417 / 4,453	0 / 0	4,453	11	31	31	
Europe Area							
TDK-Lambda Ltd.	2,055 / 1,576	0 / 0	1,576	3	120	92	
TDK-Lambda UK Ltd.	1,680 / 805	487 / 25	829	2	104	104	
America Area							
TDK Components U.S.A., Inc.	2,254 / 1,114	894 / 47	1,161	1	44	44	
TDK Ferrites Corporation	26,942 / 15,249	92,820 / 4,725	19,974	131	2,711	1,737	
Headway Technologies, Inc.	46,776 / 11,179	39,931 / 2,033	13,212	116	485	455	
TDK-Lambda Americas Inc.	2,147 / 739	2,772 / 141	880	2	16	6	
Hutchinson Technology Inc.	71,852 / 54,392	191,637 / 9,771	64,163	605	2,695	1,084	
TDK Electronics							
TDK Electronics Group ^{*4}	1,087,426 / 244,863	667,135 / 34,312	279,174	5,176	21,821	18,099	

*1: Includes TDK Kofu Corp.

*2: Figures are for the Nagaoka Technical Center.

*3: Included in scope since FY2018

*4: The Electronics Group includes TDK Electronics AG and its subsidiaries.

Sustainability | Sustainability Data

Employee Performance Data

Category	Item	Unit	FY2014	FY2015	FY2016	FY2017	FY2018
Employment	Consolidated number of employees	Persons	88,076	91,648	99,693	102,883	104,781
	Japan		8,984	8,920	9,308	9,590	9,777
	Americas		3,150	3,198	4,216	5,123	4,738
	Europe		6,720	7,763	7,674	8,045	8,205
	Asia except Japan		69,222	71,767	78,495	80,125	82,061
	Men* ¹					53,710	56,375
	Women* ¹					49,173	48,406
	Women ratio* ¹	%				47.8	46.2
	Consolidated number of employees (non-regular)* ²	Persons	46,473	39,352	33,614	31,831	28,705
	Number of employees (TDK Corporation)	Persons	3,763	4,542	4,644	5,055	5,330
	Men		3,242	3,888	3,972	4,284	4,497
	Women		521	654	672	771	833
	Women ratio	%	13.8	14.4	14.5	15.3	15.6
	Average age (TDK Corporation)	Years	43.0	43.3	44.8	43.7	43.8
	Men		43.6	43.8	45.4	44.3	44.4
	Women		39.5	39.9	41.3	40.1	40.2
	Continuous service (TDK Corporation)	Years	20.3	20.4	20.8	19.8	18.9
	Men		20.7	20.8	21.3	20.2	19.3
	Women		17.8	18.2	18.4	17.4	17.2
	Recruitment of new graduates (TDK Corporation)* ³	Persons	61	140	158	177	225
	Men		59	112	121	133	184
	Women		2	28	37	44	41
	Women ratio	%	3.3	20.0	23.4	24.9	18.2
	Mid-career recruitment (TDK Corporation)	Persons	26	41	81	82	110
	Men		25	38	69	70	100
	Women		1	3	12	12	10
	Women ratio	%	3.8	7.3	14.8	14.6	9.1
	Job leavers/dismissals (TDK Corporation)* ⁴	Persons	63	48	63	60	73
	Men		49	39	49	50	57
	Women		14	9	14	10	16
	Women ratio	%	22.2	18.8	22.2	16.7	21.9

Work-life balance	Employees taking child care leave (TDK Corporation)	Persons	13	24	18	27	23
	Men		2	3	0	5	4
	Women		11	21	18	22	19
	Ratio of such employees returning to work	%	100.0	100.0	100.0	100.0	100.0
	Paid leave acquisition rate (TDK Corporation)	%	54.3	56.0	58.9	60.4	60.7
	Employees taking caregiver leave (TDK Corporation)	Persons	1	2	0	0	3
Diversity	Ratio of womens holding managerial posts (TDK Corporation) *5	%	3.6	3.0	3.9	4.1	3.9
	Ratio of employees with disabilities (TDK Corporation)	%	2.52	2.55	2.45	2.28	2.19
Staff training	Annual training time per person *6, *7	Hours					17.4
	No. of people who completed the TCDP (Territorial Career Development Program) *7	Persons					96
	No. of participants in English language study program *7	Persons					2,442
Staff training (TDK Corporation)	Education/seminar training costs	million yen	203	214	242	239	239
	Cumulative total of participants in cross-cultural communication programs	Persons	426	473	506	525	525
	Cumulative total of participants in IMD training	Persons	285	307	328	350	373
	Cumulative total of participants in overseas trainee program	Persons	19	23	28	32	35
	Cumulative total of engineers sent to overseas universities	Persons	39	42	44	47	49
Health and safety	No. of on-the-job Accidents (Japan) Lost Time Work Accident Case	No.	435	379	362	336	318
	No. of accidents not requiring time off work		112	106	99	141	129
	No. of accidents requiring time off work *8		323	273	263	195	189
	Japan *7		15	13	16	19	21
	China		188	203	164	139	94
	Asian countries		63	45	48	48	58
	Americas/EU		35	29	38	41	52
	TDK Electronics (previously EPCOS)		134	89	96	89	93
	Ratio of accidents per 1,000 employees *9		3.67	3.42	3.21	3.00	2.79
	Accident Severity Rate (Japan) *10		0.014	0.016	0.007	0.005	0.004

*1 Data collected from FY2017 onward.

*2 Scope of own part time workers, temporary workers and manufacturing staff who work for subcontractors.

*3 Joining the company in April of following fiscal year

*4 Regular employees only (excluding retirees)

*5 Managerial posts defined as posts having subordinates, or equivalent posts

*6 Applies to programs run by the Global Human Resources Division

*7 Totals and implementation started in FY2018

*8 One day or more off from work required.

*9 Employees covered include dispatch workers, etc.

*10 Percentage of lost work days totaling 1,000 lost labor hours

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Social and Environment Considerations in the Supply Chain: Performance Data

Category	Item	Unit	FY2014	FY2015	FY2016	FY2017	FY2018
Supplier	No. of CSR self-checks at manufacturing sites *1	Site		74	78	82	81
	Executing rate *1	%		99	100	100	100
	No. of CSR voluntary audits by third-party organizations *2	Site			4	8	5
	No. of employees receiving CSR internal auditor training (total to date)	Person	121	171	198	217	217
Buyer	CSR-compliant supplier ratio *2	%			82.4	91.2	94.4
Conflict Minerals	Confirmed DRC conflict-free supplier ratio *2	%			83.2	92.3	92.6
	Number of conflict minerals survey *3	Number	2,489	2,505	2,389	2,427	2,381

*1 Implemented at all targeted manufacturing sites since FY 2015.

*2 Tallied since FY 2016.

*3 No. of replies for TDK Corporation

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Governance Performance Data

Governance

Category	Item	Unit	FY2014	FY2015	FY2016	FY2017	FY2018
Directors	No. of directors	Person	7	7	7	7	7
	Men		7	7	7	7	7
	Women		0	0	0	0	0
	Outside directors		3	3	3	3	3
	Women ratio	%	0.0	0.0	0.0	0.0	0.0
	No. of audit & supervisory board members	Person	5	5	5	5	4
	Men		5	5	5	5	4
	Women		0	0	0	0	0
	Outside audit & supervisory board members		3	3	3	3	2
	Women ratio	%	0.0	0.0	0.0	0.0	0.0
	No. of corporate officers	Person	16	19	17	18	17
	Men		16	19	17	18	17
	Women		0	0	0	0	0
	Non-Japanese		3	7	7	6	6
	Women ratio	%	0.0	0.0	0.0	0.0	0.0
Board of Directors	No. of times held	No.	13	16	14	15	13
	Outside director attendance ratio	%	100	95	100	100	97
	Outside audit & supervisory board member attendance ratio		97	98	95	100	100
Board of Audit & Supervisory Board Members	No. of times held	No.	14	15	15	14	15
	Independent auditor attendance ratio	%	98	97	98	98	98
Director Remuneration	Directors (excluding outside directors)	Million yen	335	367	377	477	315
	Outside directors		40	51	45	42	46
	Audit & supervisory board members (excluding outside audit & supervisory board members)		58	58	58	58	57
	Outside audit & supervisory board members		27	27	27	29	24

Compliance

Category	Item	Unit	FY2014	FY2015	FY2016	FY2017	FY2018
System	No. of Help Line calls	call	284	300	192	121	115

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GRI Standards Table

The "Sustainability" Website conformed to the "core" option of the GRI Standards. (Global Reporting Initiative: GRI)

GRI Items	Disclosure	Location on "Sustainability" website (includes TDK Global website)
General Disclosures		
102 General Disclosures (2016)	Organizational profile	
	102-1	Name of the organization About TDK TDK at a Glance (Homepage)
	102-2	Activities, brands, products, and services About TDK TDK at a Glance (Homepage) Products (Homepage)
	102-3	Location of headquarters About TDK TDK at a Glance (Homepage)
	102-4	Location of operations TDK Worldwide (Homepage)
	102-5	Ownership and legal form About TDK TDK at a Glance (Homepage)
	102-6	Markets served About TDK TDK at a Glance (Homepage) TDK Worldwide (Homepage) Investor Relations Sales by Region (Homepage) Investor Relations Sales by Segment (Homepage)
	102-7	Scale of the organization About TDK TDK at a Glance (Homepage) Products (Homepage) TDK Worldwide (Homepage) Investor Relations Securities Report (Homepage) Investor Relations Sales by Segment (Homepage)
	102-8	Information on employees and other workers Employee Performance Data
	102-9	Supply chain The TDK Group's Value Chain TDK's Supply Chain Responsibility
	102-10	Significant changes to the organization and its supply chain About "Sustainability" website
	102-11	Precautionary Principle or approach Efforts as a Supplier (Consider the work environment at manufacturing sites) Efforts as a Buyer (Consider the work environment of suppliers) Corporate Ethics and Compliance Risk Management Quality Assurance Activities Environmental Management System
	102-12	External initiatives Respect for Human Rights Safety and Health A History of TDK's Environmental Activities
	102-13	Membership of associations Responsible Sourcing of Minerals A History of TDK's Environmental Activities Sustainability Management
	Strategy	
	102-14	Statement from senior decision-maker Top Commitment
	102-15	Key impacts, risks, and opportunities Top Commitment Contributing to SDGs Addressing social issues by developing new kinds of products the world has not yet seen Investor Relations Operational Risks (Homepage)

102 General Disclosures (2016)	Ethics and integrity	
	102-16	Values, principles, standards, and norms of behavior Corporate Philosophy and Sustainability Sustainability Vision About TDK TDK Code of Conduct (Homepage)
	102-17	Mechanisms for advice and concerns about ethics Corporate Ethics and Compliance
	Governance	
	102-18	Governance structure Corporate Governance Governance Performance Data
	102-19	Delegating authority
	102-20	Executive-level responsibility for economic, environmental, and social topics Sustainability Management
	102-21	Consulting stakeholders on economic, environmental, and social topics Corporate Governance
	102-22	Composition of the highest governance body and its committees Corporate Governance Governance Performance Data
	102-23	Chair of the highest governance body Corporate Governance
	102-24	Nominating and selecting the highest governance body Corporate Governance
	102-25	Conflicts of interest Corporate Governance About TDK TDK Code of Conduct (Homepage)
	102-26	Role of highest governance body in setting purpose, values, and strategy Corporate Philosophy and Sustainability
	102-27	Collective knowledge of highest governance body Sustainability Management
	102-28	Evaluating the highest governance body's performance Corporate Governance
	102-29	Identifying and managing economic, environmental, and social impacts The TDK Group's Materiality
	102-30	Effectiveness of risk management processes
	102-31	Review of economic, environmental, and social topics
	102-32	Highest governance body's role in sustainability reporting
	102-33	Communicating critical concerns Corporate Governance Corporate Ethics and Compliance Risk Management
	102-34	Nature and total number of critical concerns Corporate Ethics and Compliance
	102-35	Remuneration policies Corporate Governance
	102-36	Process for determining remuneration Corporate Governance
	102-37	Stakeholders' involvement in remuneration Corporate Governance
	102-38	Annual total compensation ratio
	102-39	Percentage increase in annual total compensation ratio

102 General Disclosures (2016)	Stakeholder engagement		
	102-40	List of stakeholder groups	Sustainability Management
	102-41	Collective bargaining agreements	Respect for Human Rights
	102-42	Identifying and selecting stakeholders	Sustainability Management Dialogue with Stakeholders
	102-43	Approach to stakeholder engagement	Sustainability Management Dialogue with Stakeholders
	102-44	Key topics and concerns raised	Sustainability Management Dialogue with Stakeholders Third-Party Opinion
	Reporting practice		
	102-45	Entities included in the consolidated financial statements	TDK Worldwide (Homepage) About "Sustainability" website
	102-46	Defining report content and topic Boundaries	The TDK Group's Materiality About "Sustainability" website
	102-47	List of material topics	The TDK Group's Materiality Contribution to the World through Technology Develop Human Resources Consider the Societal and Environmental Impact of the Supply Chain Develop and Prosper in Harmony with the Global Environment
	102-48	Restatements of information	(N/A)
	102-49	Changes in reporting	(N/A)
	102-50	Reporting period	About "Sustainability" website
	102-51	Date of most recent report	About "Sustainability" website
	102-52	Reporting cycle	About "Sustainability" website Website (Past CSR Report)
	102-53	Contact point for questions regarding the report	About "Sustainability" website
	102-54	Claims of reporting in accordance with the GRI Standards	(GRI Standards Table)
	102-55	GRI content index	(GRI Standards Table)
	102-56	External assurance	Third-Party Opinion About "Sustainability" website Third-Party Review of Environmental Performance Data Third-Party Verification
Material topics			
Contribute to the World through Technology			
103 Management Approach (2016)	103-1	Explanation of the material topic and its Boundary	The TDK Group's Materiality Contribute to the World through Technology
	103-2	The management approach and its components	The TDK Group's Materiality Contribute to the World through Technology Pursure zero-defect product quality
	103-3	Evaluation of the management approach	The TDK Group's Materiality Contribution to the World through Technology Awards Received in Fiscal 2018

416 Customer Health and Safety (2016)	416-1	Assessment of the health and safety impacts of product and service categories	The TDK Group's Materiality Addressing social issues by developing new kinds of products the world has not yet seen Pursure zero-defect product quality Quality Assurance Activities Customer Satisfaction
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	(N/A)
Develop Human Resources			
103 Management Approach (2016)	103-1	Explanation of the material topic and its Boundary	The TDK Group's Materiality Develop Human Resources
	103-2	The management approach and its components	The TDK Group's Materiality Develop Human Resources
	103-3	Evaluation of the management approach	The TDK Group's Materiality Awards Received in Fiscal 2018 Develop Human Resources Cultivate a Corporate Culture that Respects Diversity
404 Training and Education (2016)	404-1	Average hours of training per year per employee	Employee Performance Data
	404-2	Programs for upgrading employee skills and transition assistance programs	Develop Global Human Resources Cultivate a Corporate Culture that Respects Diversity
	404-3	Percentage of employees receiving regular performance and career development reviews	Develop Global Human Resources
405 Diversity and Equal Opportunity (2016)	405-1	Diversity of governance bodies and employees	Governance Performance Data Employee Performance Data
	405-2	Ratio of basic salary and remuneration of women to men	Investor Relations Securities Report (Homepage)
Consider the Societal and Environmental Impact of the Supply Chain			
103 Management Approach (2016)	103-1	Explanation of the material topic and its Boundary	The TDK Group's Materiality Consider the Societal and Environmental Impact of the Supply Chain
	103-2	The management approach and its components	The TDK Group's Materiality Consider the Societal and Environmental Impact of the Supply Chain TDK's Supply Chain Responsibility Efforts as a Supplier (Consider the work environment at manufacturing sites) Efforts as a Buyer (Consider the work environment of suppliers) Responsible Sourcing of Minerals
	103-3	Evaluation of the management approach	The TDK Group's Materiality Consider the Societal and Environmental Impact of the Supply Chain Awards Received in Fiscal 2018 Efforts as a Supplier (Consider the work environment at manufacturing sites) Efforts as a Buyer (Consider the work environment of suppliers) Responsible Sourcing of Minerals
308 Environmental Assessment (2016)	308-1	New suppliers that were screened using environmental criteria	Efforts as a Buyer (Consider the work environment of suppliers)
	308-2	Negative environmental impacts in the supply chain and actions taken	Efforts as a Buyer (Consider the work environment of suppliers)

408 Child Labor (2016)	408-1	Operations and suppliers at significant risk for incidents of child labor	Respect for Human Rights Efforts as a Supplier (Consider the work environment at manufacturing sites) Efforts as a Buyer (Consider the work environment of suppliers) Responsible Sourcing of Minerals About TDK TDK Code of Conduct (Homepage)
409 Forced or Compulsory Labor (2016)	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Respect for Human Rights Efforts as a Supplier (Consider the work environment at manufacturing sites) Efforts as a Buyer (Consider the work environment of suppliers) About TDK TDK Code of Conduct (Homepage)
414 Supplier Social Assessment (2016)	414-1	New suppliers that were screened using social criteria	Efforts as a Buyer (Consider the work environment of suppliers)
	414-2	Negative social impacts in the supply chain and actions taken	Efforts as a Buyer (Consider the work environment of suppliers) Responsible Sourcing of Minerals
Develop and Prosper in Harmony with the Global Environment			
103 Management Approach (2016)	103-1	Explanation of the material topic and its Boundary	The TDK Group's Materiality Develop and Prosper in Harmony with the Global Environment
	103-2	The management approach and its components	The TDK Group's Materiality Develop and Prosper in Harmony with the Global Environment Environmental Policy and Environmental Vision Environmental Activities throughout Life-cycle Perspective Environmental Goals and Achievements Environmental Management System Creating a Framework for Gauging Product Contributions
	103-3	Evaluation of the management approach	The TDK Group's Materiality Develop and Prosper in Harmony with the Global Environment Awards Received in Fiscal 2018 Environmental Goals and Achievements Environmental Management System Third-Party Review of Environmental Performance Data Third-Party Verification
305 Emissions (2016)	305-1	Direct (Scope 1) GHG emissions	Reduction of CO₂ Emissions from Production Activities Environmental Performance Data Environmental Performance Data by Site
	305-2	Energy indirect (Scope 2) GHG emissions	Reduction of CO₂ Emissions from Production Activities Environmental Performance Data Environmental Performance Data by Site
	305-3	Other indirect (Scope 3) GHG emissions	Reduce CO₂ Emissions in Logistics Environmental Performance Data
	305-4	GHG emissions intensity	Reduction of CO₂ Emissions from Production Activities
	305-5	Reduction of GHG emissions	Reduction of CO₂ Emissions from Production Activities Cost of Environmental Protection
	305-6	Emissions of ozone-depleting substances (ODS)	A History of TDK's Environmental Activities
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Environmental Performance Data

Economic			
201 Economic Performance (2016)	201-1	Direct economic value generated and distributed	
	201-2	Financial implications and other risks and opportunities due to climate change	Investor Relations Securities Report (Homepage)
	201-3	Defined benefit plan obligations and other retirement plans	Investor Relations Securities Report (Homepage)
	201-4	Financial assistance received from government	
202 Market Presenc (2016)	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	
	202-2	Proportion of senior management hired from the local community	
203 Indirect Economic Impacts (2016)	203-1	Infrastructure investments and services supported	Social Contribution Activities
	203-2	Significant indirect economic impacts	
204 Procurement Practices (2016)	204-1	Proportion of spending on local suppliers	
205 Anti-corruption (2016)	205-1	Operations assessed for risks related to corruption	Corporate Ethics and Compliance
	205-2	Communication and training about anti-corruption policies and procedures	Corporate Ethics and Compliance
	205-3	Confirmed incidents of corruption and actions taken	(N/A)
206 Anti-competitive Behavior (2016)	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	(N/A)
Environmental			
301 Materials (2016)	301-1	Materials used by weight or volume	Environmental Performance Data
	301-2	Recycled input materials used	
	301-3	Reclaimed products and their packaging materials	
302 Energy (2016)	302-1	Energy consumption within the organization	Environmental Performance Data Environmental Performance Data by Site
	302-2	Energy consumption outside of the organization	Reduce CO₂ Emissions in Logistics Environmental Performance Data
	302-3	Energy intensity	
	302-4	Reduction of energy consumption	Reduction of CO₂ Emissions from Production Activities Expand Environmental Contribution of Products Cost of Environmental Protection
	302-5	Reductions in energy requirements of products and services	
303 Water (2016)	303-1	Water withdrawal by source	Reduce Water Usage Environmental Performance Data Environmental Performance Data by Site
	303-2	Water sources significantly affected by withdrawal of water	
	303-3	Water recycled and reused	

304 Biodiversity (2016)	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	
	304-2	Significant impacts of activities, products, and services on biodiversity	Environmental Policy and Environmental Vision
	304-3	Habitats protected or restored	
	304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	
305 Emissions (2016)	305-1	Direct (Scope 1) GHG emissions	Reduction of CO₂ Emissions from Production Activities Environmental Performance Data Environmental Performance Data by Site
	305-2	Energy indirect (Scope 2) GHG emissions	Reduction of CO₂ Emissions from Production Activities Environmental Performance Data Environmental Performance Data by Site
	305-3	Other indirect (Scope 3) GHG emissions	Reduce CO₂ Emissions in Logistics Environmental Performance Data
	305-4	GHG emissions intensity	Reduction of CO₂ Emissions from Production Activities
	305-5	Reduction of GHG emissions	Reduction of CO₂ Emissions from Production Activities Cost of Environmental Protection
	305-6	Emissions of ozone-depleting substances (ODS)	A History of TDK's Environmental Activities
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Environmental Performance Data
306 Effluents and Waste (2016)	306-1	Water discharge by quality and destination	Environmental Performance Data
	306-2	Waste by type and disposal method	Use Resources Effectively Environmental Performance Data Environmental Performance Data by Site
	306-3	Significant spills	Environmental Management System
	306-4	Transport of hazardous waste	
	306-5	Water bodies affected by water discharges and / or runoff	
307 Environmental Compliance (2016)	307-1	Non-compliance with environmental laws and regulations	Environmental Management System
308 Environmental Assessment (2016)	308-1	New suppliers that were screened using environmental criteria	Efforts as a Buyer (Consider the work environment of suppliers)
	308-2	Negative environmental impacts in the supply chain and actions taken	Efforts as a Buyer (Consider the work environment of suppliers)
Social			
401 Employment (2016)	401-1	New employee hires and employee turnover	Employee Performance Data
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	
	401-3	Parental leave	Employee Performance Data
402 Labor / Management Relations (2016)	402-1	Minimum notice periods regarding operational changes	

403 Occupational Health and Safety (2016)	403-1	Workers representation in formal joint management-worker health and safety committees	
	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	Safety and Health Employee Performance Data
	403-3	Workers with high incidence or high risk of diseases related to their occupation	
	403-4	Health and safety topics covered in formal agreements with trade unions	
404 Training and Education (2016)	404-1	Average hours of training per year per employee	Employee Performance Data
	404-2	Programs for upgrading employee skills and transition assistance programs	Develop Global Human Resources Cultivate a Corporate Culture that Respects Diversity
	404-3	Percentage of employees receiving regular performance and career development reviews	Develop Global Human Resources
405 Diversity and Equal Opportunity (2016)	405-1	Diversity of governance bodies and employees	Governance Performance Data Employee Performance Data
	405-2	Ratio of basic salary and remuneration of women to men	Investor Relations Securities Report (Homepage)
406 Non-discrimination (2016)	406-1	Incidents of discrimination and corrective actions taken	
407 Freedom of Association and Collective Bargaining (2016)	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Respect for Human Rights
408 Child Labor (2016)	408-1	Operations and suppliers at significant risk for incidents of child labor	Respect for Human Rights Efforts as a Supplier (Consider the work environment at manufacturing sites) Efforts as a Buyer (Consider the work environment of suppliers) Responsible Sourcing of Minerals About TDK TDK Code of Conduct (Homepage)
409 Forced or Compulsory Labor (2016)	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Respect for Human Rights Efforts as a Supplier (Consider the work environment at manufacturing sites) Efforts as a Buyer (Consider the work environment of suppliers) About TDK TDK Code of Conduct (Homepage)
410 Security Practices (2016)	410-1	Security personnel trained in human rights policies or procedures	
411 Rights of Indigenous Peoples (2016)	411-1	Incidents of violations involving rights of indigenous peoples	

412 Human Rights Assessment (2016)	412-1	Operations that have been subject to human rights reviews or impact assessments	Respect for Human Rights Efforts as a Supplier (Consider the work environment at manufacturing sites) Consider the Societal and Environmental Impact of the Supply Chain Performance Data
	412-2	Employee training on human rights policies or procedures	Respect for Human Rights
	412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	
413 Local Communities (2016)	413-1	Operations with local community engagement, impact assessments, and development programs	
	413-2	Operations with significant actual and potential negative impacts on local communities	
414 Supplier Social Assessment (2016)	414-1	New suppliers that were screened using social criteria	Efforts as a Buyer (Consider the work environment of suppliers)
	414-2	Negative social impacts in the supply chain and actions taken	Efforts as a Buyer (Consider the work environment of suppliers) Responsible Sourcing of Minerals
415 Public Policy (2016)	415-1	Political contributions	
416 Customer Health and Safety (2016)	416-1	Assessment of the health and safety impacts of product and service categories	The TDK Group's Materiality Addressing social issues by developing new kinds of products the world has not yet seen Pursure zero-defect product quality Quality Assurance Activities Customer Satisfaction
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	(N/A)
417 Marketing and Labeling (2016)	417-1	Requirements for product and service information and labeling	Environment-Conscious Products
	417-2	Incidents of non-compliance concerning product and service information and labeling	
	417-3	Incidents of non-compliance concerning marketing communications	
418 Customer Privacy (2016)	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	
419 Socioeconomic Compliance (2016)	419-1	Non-compliance with laws and regulations in the social and economic area	(N/A)

