



# TDK CSR REPORT 2009

English version

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## Editorial Policy

This report was created with the aim of promoting understanding of the TDK Group's CSR (Corporate Social Responsibility) activities among its stakeholders.

## Characteristics of FY 2009 Report

This document features special reports on the topics "Vision," "Courage," and "Trust" which are also key concepts of TDK's Corporate Principle.

"Vision" introduces technology sustaining TDK products fit to contribute to tomorrow's society.

"Courage" puts the spotlight on developers who explore new territory and overcome formidable

obstacles.

"Trust" features a report on a new type of event, namely a dialog with stakeholders on the topic "A Company That Earns Your Trust." Experts from outside the company offer valuable advice on the CSR approach of TDK.

## Report Format

The report is available as a brochure and as a collection of web site pages, in slightly different format to match the requirements of the respective media.

**Brochure:** Digest version of the report, containing mostly highlights of CSR activities.

**Web site:** More complete coverage comprising detailed information and data.

### CSR Report (Brochure)



### CSR Report (Web Site)



[http://www.tdk.co.jp/csr\\_e/index.htm](http://www.tdk.co.jp/csr_e/index.htm)

**CSR Philosophy**

- Top Message
- Corporate Philosophy and TDK Code of Ethics
- CSR of TDK Group
- A History of TDK's CSR Activities
- Economic Performance Report
- Corporate Governance

**Social Responsibility**

- Customer Relations (Quality Assurance)
- Supplier Relations
- Employee Relations (Employment and Human Resources)
- Employee Relations (Safety and Health)
- Shareholders and Investor Relations
- Corporate Communications
- Local Community Relations
- Sponsor Activities

**Environmental Responsibility**

- Environmental Policy and Environmental Vision
- Targets and Results
- Environmental Management System
- Environmental Risk Management
- Outline of Environmental Load
- Preventing Global Warming (Manufacturing)
- Preventing Global Warming (Distribution)
- Managing Waste
- Promoting the Creation of Environment-Conscious Products

**CSR Highlights**

- TDK Products with Future Vision
- Courageous Spirit of Craftsmanship
- A Company That Earns Your Trust

**CSR Data**

- A History of TDK's Environmental Activities
- Facilities with ISO14001 and OHSAS18001 Certification
- Environmental Performance Data
- Cost of Environmental Protection
- Environmental Performance Data by Site

## Guidelines Used

GRI Sustainability Reporting Guidelines 2006

## Period Covered

Fiscal Year 2009 (April 1, 2008 – March 31, 2009)

\* Some activities outside of this period are also covered.

## Organizations Covered

TDK Group\*

\* TDK Group: TDK Corporation and 135 consolidated subsidiaries in Japan and overseas

## Major Organizational Change During Covered Period

Since October 2008, the EPCOS Group has become a consolidated subsidiary, but its activities are not covered in this report.

## Scope of Data

Economic performance section: TDK Group

Social activities section:

Scope as indicated for each report.

Environmental section:

All sites for which Environmental Management System is configured.

## Cover Page Design

The woven band of flowers symbolizes the intricate link between people, society, and the environment. It also expresses how various electronic components from TDK play a vital role and are linked in the set product.

# TDK CSR REPORT 2009

## Contents

- 03 Top Message
- 05 Corporate Philosophy and TDK Code of Ethics
- 06 CSR of TDK Group
- 07 A History of TDK's CSR Activities

## Highlights

- 09 Highlights 1 "Vision" TDK Products with Future Vision
- 13 Highlights 2 "Courage" Courageous Spirit of Craftsmanship
- 15 Highlights 3 "Trust" A Company That Earns Your Trust (Stakeholder Dialog)

## Corporate Report

- 17 Economic Performance Report
- 19 Corporate Governance

## Social Report

- 21 Customer Relations
- 23 Supplier Relations
- 25 Employee Relations (Employment and Human Resources)
- 27 Employee Relations (Safety and Health)
- 28 Shareholders and Investor Relations
- 29 Local Community Relations

## Environmental Report

- 31 Environmental Policy and Environmental Vision
- 33 Targets and Results
- 35 Environmental Management System
  - Environmental Risk Management
  - Outline of Environmental Load
- 37 Preventing Global Warming (Manufacturing and Distribution)
- 39 Managing Waste
- 40 Promoting the Creation of Environment-Conscious Products

## Corporate Information

Corporate Name TDK Corporation

Corporate Headquarters  
1-13-1, Nihonbashi, Chuo-ku, Tokyo,  
103-8272

Date of Establishment December 7, 1935

Paid-in Capital 32,641,976,312 yen  
(As of March 31, 2009)

Number of employees (Consolidated)  
66,429 (As of the end of March, 2009)

Net Sales (Consolidated)  
727,400 million yen  
(Fiscal year ended March 31, 2009)

Net Loss (Consolidated)  
63,160 million yen  
(Fiscal year ended March 31, 2009)

Dare to dream—Dare to be different.  
In a spirit of courageous craftsmanship,  
TDK creates products of true value.



The history of TDK begins with ferrite, a magnetic material that we adapted to industrial use for the first time in the world. Rather than imitating others, we aim to create new things, and do so already from the initial stage, starting with the raw material. At the other end of the process, our concern extends to the way the set products are used in society. We like to explore and forge our own solutions with creative thinking. This spirit of inquiry has driven our company from the very beginning, and it still defines TDK today.

A field that we have been engaged in continuously is magnetics, with ferrite as the core element. Hearing comments such as “When thinking magnetics—think TDK” therefore comes as no surprise. We have earned this reputation through involvement with a wide range of products, and I strongly intend to continue this policy. Some examples include cassette and video tapes, recording heads for hard disk drives, and more recently MRAM (Magnetic Random Access Memory) which features low power consumption and high operation speed and is considered a promising next-generation memory technology.

We believe that the technical expertise gained by TDK over the years has the potential to make a significant contribution in solving various problems which society is facing today. A case in point is the creation of technology to reduce power conversion losses occurring during the transmission of electrical energy. Also, by making electronic components smaller and lighter while retaining high performance, we can help reduce the environmental load of society in general. Through forward-looking thinking and the quest for innovative solutions, we can anticipate the needs of our customers

which in turn respond to the needs of society. This opens up a range of new and exciting possibilities.

We encourage our entire staff of about 60,000 people to tackle difficult challenges head-on, to become part of the creative process, without being afraid of the occasional failure. The quest for new products of true value begins with asking questions, looking at existing phenomena and situations in a new light. In doing so, we should not isolate ourselves but always reach out and be communicative. Gaining experience through interaction and moving forward is invaluable. But the most important aspect is the power to dream. I see it as my own responsibility to instill an imaginative outlook in all members of our organization.

A development that is attracting a high level of interest recently is magnetoelectronics. It is also called “spintronics” because it involves groundbreaking research into ways to utilize the spin of electrons. TDK is in a position to use its expertise in the field of magnetics to foster the transition “from electronics to spintronics.” It is our dream to help build a bridge into a new dimension of scientific achievement.

TDK is progressing steadily with an eye on future visions. Some aspects of our current efforts are described in this report. I hope that you will find it interesting reading, and heartily welcome your comments and suggestions.

President & CEO  
TDK Corporation  
Takehiro Kamigama



To ensure that TDK continues to earn the trust of society, all the employees in their daily activities are implementing the corporate philosophy and ethics as expressed in the Corporate Motto.

# Corporate Philosophy and TDK Code of Ethics

## Corporate Philosophy

### Corporate Motto

Contribute to culture and industry through creativity

### Corporate Principle

Employee attributes "Vision" "Courage" "Trust"

- Vision** Always take a new step forward with a vision in mind. Creation and construction are not born without vision.
- Courage** Always perform with courage. Performing power is born by confronting contradiction and overcoming it.
- Trust** Always try to build trust. Trust is born from a spirit of honesty and service.

## TDK Code of Ethics

Established in April 2002; revised in May 2005

### Corporate Ethical Philosophy

TDK Members shall strive to fully implement the following concept while recognizing its importance for TDK and other parties.

- TDK Group and TDK Members shall observe the laws, regulations, and standards of society applicable to TDK and conduct business in a fair and sound manner.
- TDK Group shall contribute to society by providing excellent products and services.
- TDK Group shall respect each member's personality and

individuality and ensure a safe and comfortable work environment.

- TDK Group shall maintain a strong and amicable relationship with its customers, suppliers, employees, shareholders and other stakeholders.
- TDK Group shall constantly seek to be a good corporate citizen by contributing to society and the community.
- TDK Group shall contribute to protecting the global environment and to building a secure and comfortable society.

### Corporate Standards of Business Conduct

In the process of conducting TDK business, TDK Members shall actively increase their awareness of the following concepts.

#### Business Activities

- Supply of excellent products and services and maintenance of safety
- Maintenance of sound and good relationship with customers, suppliers and other business partners
- Maintenance and promotion of fair and free competition
- Protection of intellectual property rights
- No conflict of interest
- Protection of confidentiality
- No use of business opportunities of the TDK Group for personal benefit
- Fair dealing
- Protection and proper use of TDK Group's assets

#### TDK Group and Employees

- Respect for each employee's personality and individuality
- Respect for privacy
- Respect for human rights
- Observance of legal requirements for working conditions
- Maintenance of a safe, healthy and comfortable work environment

#### TDK Group and Society

- Compliance with applicable laws and regulations
- Disclosure of information
- Protection of the global environment
- Contribution to society and the community

\*As for the details of TDK Code of Ethics, please refer the following URL. <http://www.tdk.co.jp/teaaa01/aaa06000.htm>

# CSR of TDK Group

For the TDK Group, CSR efforts take shape through the implementation of our Corporate Motto and the pursuit of the corporate ethics. This means that all the staff members bases their daily activities on the guidelines laid down in the Corporate Ethical Philosophy and the Corporate Standards of Business Conduct. The Corporate Motto and Corporate Principle are short representations of these ideas.

Ever since its founding, the TDK Group has been focusing on creating truly valuable products through innovation and technological drive. This was made possible by a complex interplay of all our stakeholders, namely our customers and suppliers, the local communities of the areas where we operate, our shareholders and investors, and of course all our employees. We intend to further strengthen the ties between all of these interrelated groups, making sure that clear and open channels of communication exist. By asking what is expected of us and what kind of value we can deliver, we will be able to contribute to society through our products and our sense of craftsmanship.

## TDK's Stakeholders



## CSR Promotion Structure

CSR activities at TDK are conducted under the guidance of the Business Ethics & CSR Committee and its subordinate organization of the CSR Task Force.

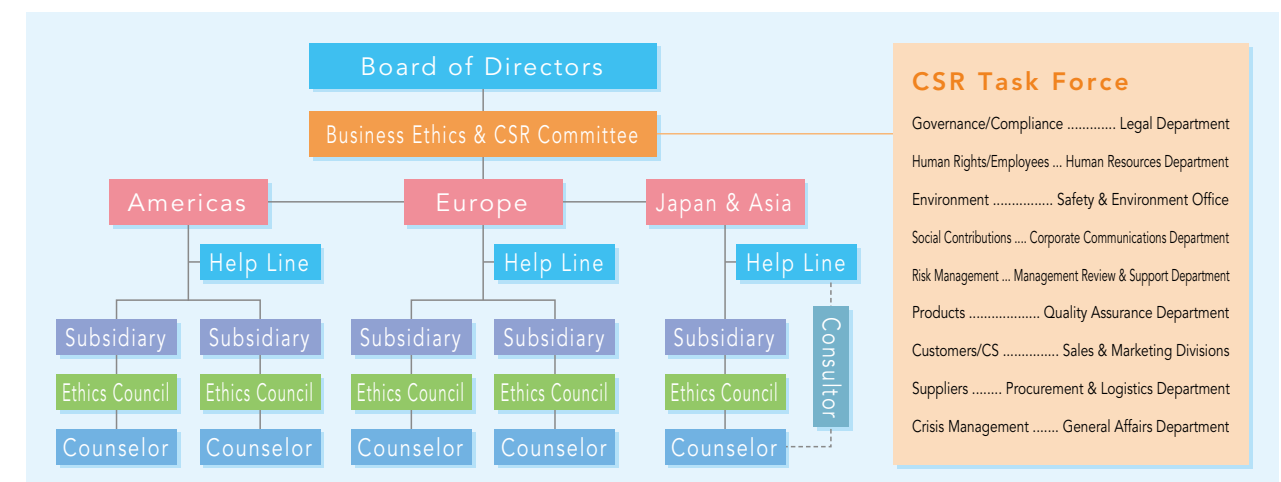
### Business Ethics & CSR Committee

The Business Ethics & CSR Committee reports directly to the Board of Directors. The committee is comprised of the Administration Group General Manager and Function Managers from the Management Review & Support Department, Finance & Accounting Department, Human Resources Department, General Affairs Department, Legal Department, and Corporate Communications Department. The mission of the committee is to promote awareness of the TDK Code of Ethics. This is achieved by implementing training programs and carrying out many other activities aimed at the staff of TDK Group companies all over the world. It identifies problem points and attempts to find solid and lasting solutions.

### CSR Task Force

This workgroup operates under the umbrella of the Business Ethics & CSR Committee. Experts from the respective fields work together to deal with various CSR topics, namely "Governance/Compliance" "Human Rights/Employees" "Environment" "Social Contributions" "Customers/CS" "Quality Assurance" "Suppliers" and "Risk Management". In response to issues identified by the Business Ethics & CSR Committee as relevant to CSR in the electronic component business, the Task Force carries out investigations and implements a broad scope of CSR related activities.

## CSR Promotion Structure



# A History of TDK's CSR Activities


Ever since its founding, TDK has contributed to society by making products of value. This section presents a short overview of how TDK as a company has responded to the needs and expectations of society.

**1935**  
Company founded

**1967**  
Corporate Motto and Corporate Principle established

**1993** » Environment Protection Activities (from 1993 onwards)


- 1993 TDK Environmental Voluntary Plan established
- 1997 Mikumagawa Plant obtains ISO 14001 certification for Environmental Management System
- 1999 Green Procurement starts
- Regular release of Environmental Report begins
- 2002 Mass production technology for electronic components compatible with lead-free solder developed
- TDK Environmental Action 2010 established



TDK's Environmental Report 1999

**2002** » CSR Activities (from 2002 onwards)

- 2002 Business Ethics Committee formed (renamed Business Ethics & CSR Committee in 2005)
- TDK Code of Ethics established
- 2004 Company-wide system obtains OHSAS 18001 (Occupational Health and Safety Assessment Series) certification
- 2005 CSR Task Force established
- 2006 TDK's CSR activities defined as implementing the corporate motto and pursuing of corporate ethics
- 2007 Zero emissions achieved for all manufacturing sites
- 2009 TDK decides on "EICC+JEITA" as the core of site based CSR activities
- TDK CSR Self Evaluation established and distributed



TDK Corporate Standards of Business Conduct Handbook Japanese/English

## Things That Change and Things That Remain

TDK as a company was formed for the purpose of industrializing ferrite, a revolutionary magnetic material with unique properties that had been invented in Japan. During the seventy years since then, we have based our activities on a spirit of craftsmanship, which means creating a product from scratch, beginning with a thorough understanding of the source material. This has enabled us to turn out creative and valuable products that contribute to the advancement of the "electronics society" of today.

The TDK Group will continue to develop and offer innovative and meaningful products. On the other hand, the environment in which we find ourselves is constantly evolving and changing. As the scope of our business activities expands, we obtain more opportunities to contribute to society, but we must also be aware of the possible dangers and pitfalls. The responsibility that industry has to society as a whole is getting ever more complex and important.

## What Can We Do for the Future Now?

At the Earth Summit in 1992, the fact that environmental problems were an issue of global concern was fully realized for the first time. In response, TDK formulated an Environmental Voluntary Plan which became the basis for our activities aimed at protecting the environment.

In 1997, TDK's Mikumagawa Plant obtained ISO 14001 certification. Moving further along this path, a unified Environmental Management System became operative for all Japanese domestic sites in 2005. This ensures that our environmental protection activities are placed within a consistent and comprehensive framework.

In 2002, restrictions on the use of harmful substances started to gain traction, and TDK established mass production technology for electronic components fully compatible with lead-free solder. In the same year, realizing the need to have an action plan for sustainable development and establishing a recycling-oriented society, TDK devised the "TDK Environmental Action 2010." This plan formulates concrete action items as well as medium and long term goals matched

to the characteristics of TDK as a company. It clearly outlines what sites, divisions, and staff departments have to do in order to further intensify our environment-oriented efforts. Currently, a new long-term plan with a global outlook called "TDK Environmental Action 2015" has been released. It shows how the entire TDK Group will work towards fully sustainable development and the realization of a no-waste, recycling-oriented society.

Note: As for TDK's Environmental activities, please refer the following URL.  
[http://www.tdk.co.jp/csr\\_e/csr05100.htm](http://www.tdk.co.jp/csr_e/csr05100.htm)

## Evolving CSR Activities

The responsibilities of industry towards society, and the expectations and demands placed by society on businesses are ever evolving and expanding. Beyond measures to protect the environment, other increasingly important requirements include transparency of management, concern for human rights and equal opportunity, and meaningful communication between all parties that are stakeholders of the company.

In the electrics and electronics sector, the Electronic Industry Citizenship Coalition (EICC) was formed in the U.S. Inspired by this development, the Japan Electronics

and Information Technology Industries Association (JEITA) published a Supply-Chain CSR Deployment Guidebook in 2006. As these developments in the industry show, CSR concerns not only the members of a single company or group, it also extends to suppliers and the entire manufacturing and marketing chain. A common understanding of this vital fact is emerging now. The TDK Group is both a supplier and a consumer of raw materials, and our CSR activities are to be based on a comprehensive policy.

## Future Outlook for the TDK Group

With an eye on the near future, TDK will further consolidate its CSR activities with the aim of enhancing the quality of management. The capability for CSR self-evaluation at the various sites of the group will be strengthened, which will inspire staff members at the respective sites to take the initiative and turn policy into action.

The spirit of craftsmanship that has characterized the TDK Group since the beginning will continue to be relevant. At the same time, we need to adapt to the changing needs of society, enabling us to contribute to society in a meaningful and productive way through the products we make.



# TDK Products with Future Vision

The TDK Group is constantly developing new products that derive their strength from our original technology and know-how. Because our output is mostly electronic components, the end-user rarely encounters our products directly, but they are at the core of what makes many set products function. By extension, the set products embody our vision for the future. A few examples are shown below, highlighting sophisticated technology for effective use of energy and for a new generation of environment-conscious products.

### AC-DC, DC-DC Power Modules for High-Voltage DC Current Power Feeding Applications

Designed for HEMS (Home Energy Management Systems) to efficiently supply electrical energy inside the home.



### Two-Way AC/DC Converter for PHEVs\*

Used for converting AC from the commercial power network into DC for PHEVs, and also for supplying energy to the home in DC form.

\* PHEV: Plug-in Hybrid Electric Vehicle



### High-Capacity Lithium Ion Battery

Ideal for storing energy produced by solar power and wind power generators and supplied from outside the home.



### DC Electrification Eco Home

Normally, electrical power is supplied to residential homes in the form of AC (alternating current) by power companies or other providers. However, because many electrical appliances actually run on DC (direct current), AC adapters are needed to convert the alternating current into direct current. In the DC electrification eco home on the other hand, power is distributed as direct current. Power obtained from natural energy sources is stored in lithium-ion batteries, eliminating the need for the conversion stage with its inherent losses. Consequently, energy can be used more efficiently, which helps to reduce CO<sub>2</sub> emissions.

### Dye-Sensitized Solar Cells

Used in solar power generation that turn solar energy into electrical energy, for greatly reduced CO<sub>2</sub> emission levels.



### Soft Magnetic Metal Material for Generators and Motors

Utilized in generators and motors in wind power installations that turn wind energy into electrical energy.



### DC-DC Converter

Used in PCUs (Power Control Units) of hybrid electric vehicles to turn the high voltage from the batteries into the lower voltage required to drive the electronic equipment of the automobile. Featuring high conversion efficiency as well as compact dimensions and low weight, these TDK products contribute to better fuel economy.



### Battery Current Sensor

Designed for detecting input and output current levels in battery systems, so that overcharging and excessive discharging can be reliably prevented. This protection contributes to longer battery life. Accurate detection of remaining battery capacity is another important aspect for precise system control, which contributes to better fuel economy.



### Hybrid Electric Vehicle

Automobile that uses both an electric motor and a combustion engine to achieve much better fuel economy than a conventional automobile. Exhaust gas is cleaner, with significantly lower CO<sub>2</sub> emissions. This type of vehicle is currently attracting a lot of attention because of its overall lower environmental load.

### High-Performance Neodymium Magnet NEOREC 53 Series

Proprietary TDK technology has made it possible to build magnets with drastically improved magnetism. These are used in the electric motors of hybrid electric vehicles, providing assistive power to the engine and enabling the recycling of energy. The magnets have excellent heat resistance characteristics, which prevent a drop in motor output power at high temperatures, thereby contributing to better fuel economy.



# TDK Products with Future Vision

## The Technology Behind TDK's Environment-Conscious Products

TDK creates its range of environment-conscious products by fully utilizing its core technologies. There include

materials technology at the source, process technology to develop and optimize the characteristics of materials and apply them in products, as well as evaluation and simulation technology to sustain and accelerate our development and design activities.

Some examples of how technology is applied are shown below.

### Changes in environment-conscious design of chip components

1990

Size 2012

Raw material usage =  $\frac{1}{200}$

Electrical power used for sintering =  $\frac{1}{100}$

2008

Size 0402

Taping

**Packaging material usage: 80% reduction**

**Transport related CO<sub>2</sub> emissions: 80% reduction**

**Storage space requirements: 80% reduction**

CO<sub>2</sub> emissions from sintering

**Approx. 99% reduction**

1990

Sn-Pb plating  
Precious metal : Pd

2008

Sn plating  
Base metal : Ni

|                                       |   |   |
|---------------------------------------|---|---|
| <b>Lead-based dielectric material</b> | Complete elimination of harmful substances                                    | <b>Non-lead-based dielectric material</b> |
| <b>Precious metal (Pd) material</b>   | Reduction in use of precious metals<br>Reduction in energy used for sintering | <b>Base metal (Ni) material</b>           |
| <b>Pb glass terminal electrode</b>    | Complete elimination of harmful substances                                    | <b>Non-Pb-glass terminal electrode</b>    |
| <b>Sn-Pb terminal electrode</b>       | Complete elimination of harmful substances<br>Response to lead-free soldering | <b>Sn terminal electrode</b>              |

## The Eco Love Logo and TDK Products

The Eco Love symbol is meant to indicate that a product is based on love for our global environment. Its design expresses our stance, awareness, and concern for environmental issues.

The logo is used widely, both for company-internal communications related to our drive for creating

environment-conscious products and in promotional material aimed at third parties. It serves to identify environment-conscious products that have special merits, and is found in catalogs, on our web site, and in other locations.

We intend to further increase the ratio of "Eco Love" and "Super Eco Love" products in our overall output in future. Together with our customers, we want to help protect the earth and achieve sustainable progress.

### TDK's Environment-Conscious Products Line-up

**SUPER ECO LOVE products**

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**ECO LOVE products**

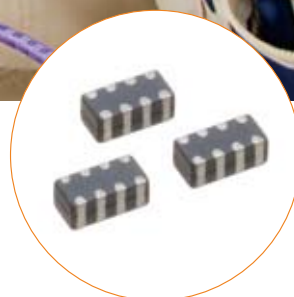
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# Courageous Spirit of Craftsmanship



**A key aspect of TDK's approach to making products is "courage." The courage to challenge a difficult task without fear of failure, in order to meet the needs of society and create something new. As a case in point, let us introduce the members of the development team who received the "CHO (Super)" MONODZUKURI Innovative Components Awards in 2008 for their work on a noise filter for high-speed signals.**



Know-how and technology concentrated in a miniature package: TCM2010H measuring a mere 2.0 x 1.0 x 0.8 mm

## Development of Miniature Noise Filter Using Thin-Film Technology

With the rapid shift of TV and other electronic devices towards digital formats and higher performance, the requirements placed on components used in such equipment also are undergoing a drastic change. The common mode filters produced by TDK are a case in point. Noise filters used in the input and output circuitry of TV sets, computers, and many other devices serve to remove noise generated during the transmission of audio, video and other data. They are indispensable elements for ensuring high data quality. In recent years, the high-performance HDMI interface enabling reliable transmission of large amounts of data at high speed has become widespread, bringing with it the need for noise filtering capable of handling very high signal speeds.

To meet these needs, TDK released the TCM2010H miniature noise filter array for high-speed signal lines in 2007. "As a matter of fact, there were already filters on the

market for use with high-speed signal lines, both from TDK and from other manufacturers." says one of the developers, Tomokazu Ito who works at the TDK Shonai. "However, they all were coil types which require quite a bit of space. The TCM2010H was drastically different, because it is a thin-film type small-sized product capable of handling high signal speeds. This was made possible by applying our technology for forming films with micrometer-level precision."

The small dimensions of course enhance the usefulness of the product and its application scope, but that is not all. They also mean that fewer raw materials and less energy are consumed during the manufacturing process, and that the Print-circuit board and the final dimensions of the product in which it is used can also be smaller, thereby reducing the environmental load.

The engineers working on this project were aiming not only to create a product to fit an immediate need but also one that takes the wider context of the environment into consideration. This kind of attitude formed the background of the development of the TCM2010H.

## Perseverance Through Trial and Error Is the Key

TDK has a proud and successful history of technological breakthroughs, for example in the field of thin-film magnetic heads for recording media applications. Why not apply the thin-film technology and know-how gained in this process to the field of electronic components as well? That was one of the ideas that inspired Mr. Ito and his colleagues to develop a thin-film type noise filter.

But of course, it was not a matter of simply using the same technology as for magnetic heads. Developing the filter required first building various prototypes based on design specifications, and then evaluating and analyzing their actual performance. Where are the problems, why are the targeted results not achieved? The team identifies possible causes, and a new, improved prototype is built. This process must be repeated not once or twice but numerous times.

The common view at the time held that it would be virtually impossible to adapt thin-film type noise filters to high-speed signal transmission applications. And of course, no manual or primer existed to which one could turn when trying to find out why the prototypes didn't deliver the desired functions and performance. The only way for the development team to forge ahead was to keep on brainstorming, discussing the various aspects over and over, and persevering with the test runs. "The fact that we were expected to produce results within a fairly short time frame considerably added to the pressure that we felt. After all, our research, even if on an important topic, is not an end in itself, it only has meaning if it leads to a usable product within a reasonable period of time" remarks Mr. Ito as he looks back on this difficult time. Because the team was in novel territory, of course nobody expected them to succeed right away, but at times they did not even see a possible avenue for progress, and were left wondering where the light at the end of the tunnel might be coming from. It certainly was a trying time. Remarkably, however, nobody ever suggested to give up. The spirit of craftsmanship and of challenging a difficult task in the face of adversity is very strong in the entire TDK organization, and it naturally applies to the research and development staff working at the forefront of new product development as well.



Some of the team members who worked towards a common goal



"The cooperation among departments is what makes TDK special" says Mr. Ito.

After overcoming innumerable failures, the noise filter TCM2010H finally became a reality in June 2007, featuring a footprint that was about one half that of a conventional coil-type product. About one year had elapsed since the first prototype was built, and the efforts of the R&D team had now resulted in a breakthrough success.

## Collaboration and Cooperation Lead to Success

In the year following its introduction, the TCM2010H series, which successfully combined small dimensions with high performance, attracted considerable interest and received a lot of praise for the advanced technology it represents. The Nikkan Kogyo Shimbun awarded it the "CHO (Super)" MONODZUKURI Innovative Components Awards in the electric and electronic component category. "Of course, gaining recognition from a wider audience is a great joy and it provides the motivation for our work. But when hearing of the prize, even stronger was the feeling of gratitude to all the staff members in the various departments who had taken part in the development" reminisces Takeshi Okumura who worked with Mr. Ito on the project.

As indicated by this comment, the TCM2010H indeed was not solely the brainchild of the designers around Mr. Ito. The cooperation of many people in various sections of the organization, such as the evaluation and manufacturing department, employees from the magnetic heads department who worked on thin-film head development, and many others was vital during the process. "All of these people worked towards the same goal and shared the same concerns. That is what made the development possible. And we were keenly aware of their efforts, so we felt even more that we couldn't just fail or give up. The success of the TCM2010H demonstrates how important it is to strengthen the collaboration between different departments in our company when developing new products, something that not necessarily was a given in the past" says Mr. Ito.

Both Mr. Ito and Mr. Okumura agree: "Our first thoughts after the TCM2010H was released went along the lines of 'What comes next?' and 'How can we create something that's even better?'" The courageous spirit of many people working together sustains the TDK tradition of creating products in a craftsmanlike manner. This is the drive that is alive today and is carrying us into the future.



# A Company That Earns Your Trust



**What is expected of a company to gain the trust of society? We invited some key figures from outside the company to discuss the responsibilities that a business has with regard to its place in society, and to get pointers on the direction in which TDK should be going.**



The question of what a company should do to fulfill the expectations of society and earn its trust is at the heart of the CSR concept. This was the main topic of the discussion. Three outside CSR experts with different backgrounds provided valuable advice and insights, based on their respective experiences and viewpoints.

Ms. One Akiyama, president of Integrex Inc., an independent research company specializing in integrity-based socially responsible investment (SRI) talked about changes in value concepts expected from the industry and which role CSR should play in the activities of a business. Mr. Toshihiko Fujii who works at the Ministry of Economy, Trade and Industry and has extensive experience in negotiations with European government

institutions and industry representatives stressed that CSR should be seen not as theoretical principle or an externally imposed obligation but as a means of risk management and a business strategy. Finally, Mr. Masaaki Kogure who previously headed the corporate secretarial office at Daiei gave his views on what a business needs to survive, based on his extensive experience.

In response, participants from TDK voiced opinions such as “CSR already seems to be one of the preconditions when dealing with customers.” “CSR should be rooted in the particular tradition and culture of a company.” and “Delivering products of high quality will be the key to CSR as implemented by TDK.”

- Participants for TDK**
- Seiji Enami**, Director and Executive Vice President
  - Junji Yoneyama**, Corporate Officer and General Manager, Human Resources Department
  - Osamu Yotsui**, General Manager, Management Review & Support Department
  - Takahiro Kokai**, Manager, Planning Section, Strategic Sales Division, Electronic Components Sales & Marketing Group
  - Tetsushi Shimonishi**, Planning Section, Strategic Sales Division, Electronic Components Sales & Marketing Group
  - Koji Inukai**, General Manager, Quality Assurance Department
  - Yoshitaka Mochizuki**, Manager, Quality Planning Section, Quality Planning Group, Quality Assurance Department

- Kimio Watanabe**, Manager, Planning Group, Procurement & Logistics Department
- Akihiko Ayabe**, Senior Manager, Personnel Group, Human Resources Department
- Kenichiro Fujisaki**, Leader, Legal Group, Legal Department
- Hirofumi Inoue**, Sub Leader, Legal Group, Legal Department
- Toshinobu Shiokawa**, General Manager, Safety & Environment Office
- Hiroshi Kobayashi**, Global Warming Countermeasure Section, Safety & Environment Office
- Tatsuhiko Atsumi**, General Manager, Corporate Communications Department
- Kazuyuki Kawamoto**, Manager, CSR Task Force, Corporate Communications Department

## Opinions of Outside Experts



**One Akiyama**  
President  
Integrex Inc.

Since last year, there has been a significant change in the value perception of businesses worldwide. Emphasis is clearly shifting from short-term profits to creating long-term value. The main focus no longer is simply the profit margin but the process of creating value. And this process is what CSR is all about.

All members of a company, the entire staff, need to understand the company principles and what the company is aiming for. Therefore it is important to think about what CSR means for any particular company. It must be an expression of the characteristics of the company. By sharing the same values and working for the same goals, the various departments of a company no longer will operate in isolation, concerned only with what's best for them. Rather, they will be working towards what's best for the entire enterprise and what's best for society. This is what CSR activities should be all about.



**Masaaki Kogure**  
Ph.D., Sociology  
Senior Researcher,  
Institute of Prosocial Research

I often point out that CSR could be taken to stand for “Rely,” “Satisfy,” and “Consistency.” Without these three elements, there will be no trust, and without trust from the public and society, a business cannot continue to exist.

In the case of a business-to-business company such as TDK, the natural tendency may be to focus on the immediate customer, but it is important to keep the fact in mind that at the end of the chain there is the end user.

Another important element for the healthy development of a company is to create a company climate where staff can speak their minds freely and where they can develop and realize their potential fully. Creating such a culture within the company is the most important CSR activity in my experience.



**Toshihiko Fujii**  
Director, Multilateral Trade System Department,  
Ministry of Economy, Trade and Industry  
Consulting Fellow,  
Research Institute of Economy, Trade and Industry

The concept of CSR originated in demands made by society, that is to say it was externally imposed on the industry. However, there are cases worldwide where, in meeting these external demands, the technological and organizational changes made by a company led to their developing new markets and becoming more competitive. Engaging in CSR can be seen as a powerful strategic move on the part of a company. CSR is not merely a matter of attitude, rather it implies that a company actively looks forward and tries to identify and predict issues that will become important to society at large. This in itself is an important management aspect. In this sense, it must be handled in a professional manner and requires the establishment of a dedicated department.

## Responses from TDK



**Seiji Enami**  
Director and Executive Vice  
President,  
TDK Corporation

This meeting made me realize anew the interdependence between the very existence of a business and CSR.  
“When in doubt, do not look at short-term profits but consider ‘what is beautiful?’” With this advice from former leaders of our company in mind, we should not only respond to the short-term requirements of our customers but also look at the big picture. We need to clearly realize what society expects of us, both now and in future, and what we can do to further harmony and integration in our organization. These are the topics that will guide our activities from now on.



**Junji Yoneyama**  
Corporate Officer  
General Manager, Human Resources  
Department, TDK Corporation

I believe that TDK so far has pursued a very down-to-earth policy with regard to CSR activities, but I came to realize that we may not have communicated this fully to our staff.  
We need to spread the word internally, to make our goals clear, and then pursue these activities in such a way that they contribute to the organization as a whole.



# Corporate Report

By delivering imaginative products, technology, and services to be truly proud of, TDK aims to build a relationship of trust among all of its stakeholders for mutual benefit. To realize this, we have built a management framework based on compliance, transparency, and soundness.

## Economic Performance Report

Investor Relations [http://www.tdk.co.jp/ir\\_e/index.htm](http://www.tdk.co.jp/ir_e/index.htm)

### Business Outline

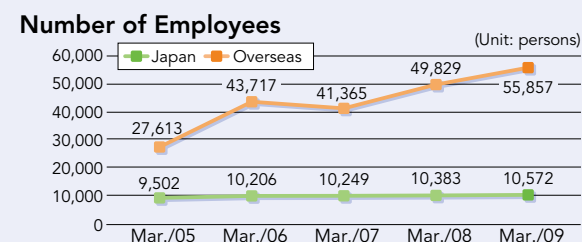
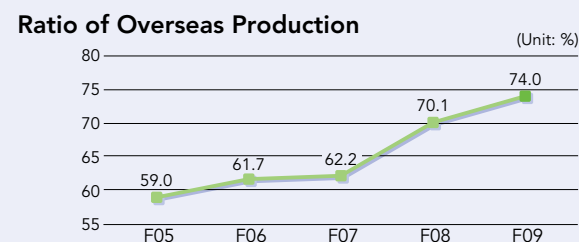
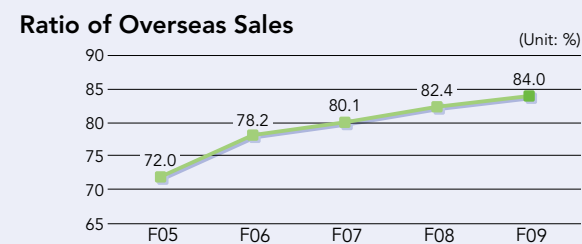
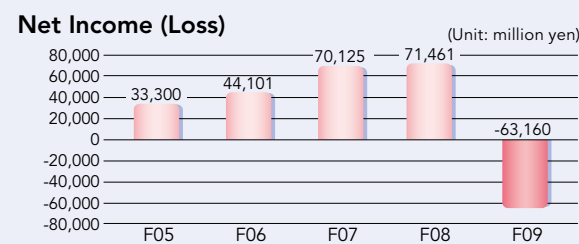
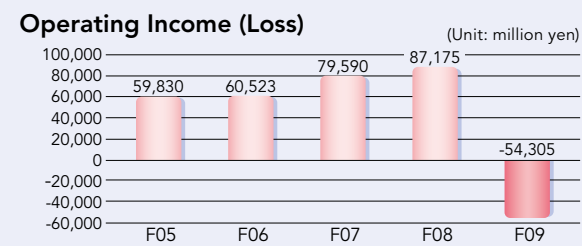
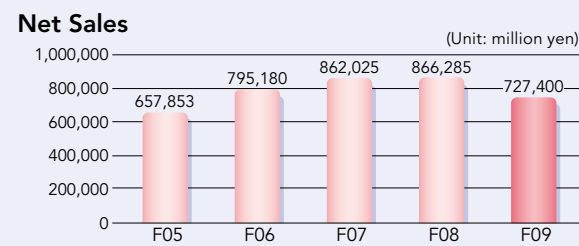
The TDK Group has its origins in a company formed in 1935 with the aim of adapting the magnetic material ferrite to industrial use, for the first time in the world. Based on the motto "Contribute to culture and industry through creativity," TDK has been engaged in research, development, and manufacturing of products for electronics materials, electronic devices, recording devices, and more.

In order to remain a vital company also in future, we believe that the quest to find new approaches and new solutions must continue. This will make it possible for us to deliver true value to all our stakeholders, namely our customers, suppliers, shareholders, local communities, and our employees.

### Business Results Overview for Fiscal 2009

In the fiscal year ended March 31, 2009, the consolidated results of the TDK Group were as follows. Net sales 727.4 billion yen (preceding term 866.285 billion yen, representing a 16.0 % decrease), operating loss 54.305 billion yen (preceding term 87.175 billion yen income), net loss before income taxes 81.630 billion yen (preceding term 91.505 billion yen profit), net loss 63.160 billion yen (preceding term 71.461 billion yen profit), net loss per share 489.71 yen (preceding term 551.72 yen profit).

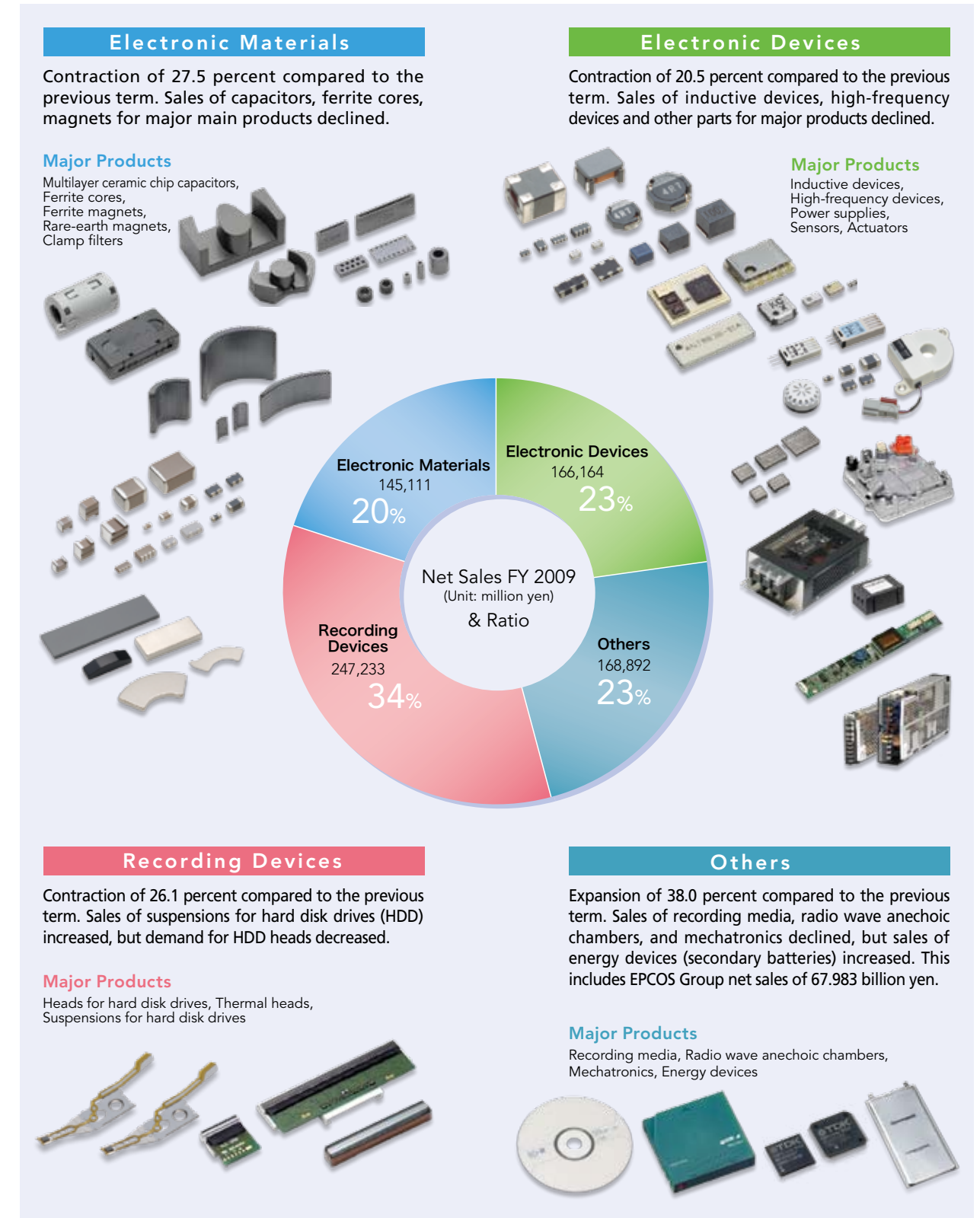
### Transition of major financial indicators



## Business Results Overview by Products

The business activities of the TDK Group are divided into four sectors: Electronic Materials, Electronic Devices, Recording Devices, and Others.

### Outline of Sales by Product Group for FY2009





# Corporate Governance

Corporate Profile → CSR Activities → Corporate Governance [http://www.tdk.co.jp/csr\\_e/csr01600.htm](http://www.tdk.co.jp/csr_e/csr01600.htm)

## Basic Concept of Corporate Governance

We are keenly aware that a corporation is a social entity and its existence is dependent upon all its stakeholders, including shareholders, customers, suppliers, employees and local communities. As a good corporate citizen, a corporation must not only comply with laws, regulations and social norms, but also act justly and fairly in its dealings with society. We believe that it is important to establish a corporate governance system that ensures efficient and sound corporate activities in order to fulfill our corporate social responsibilities.

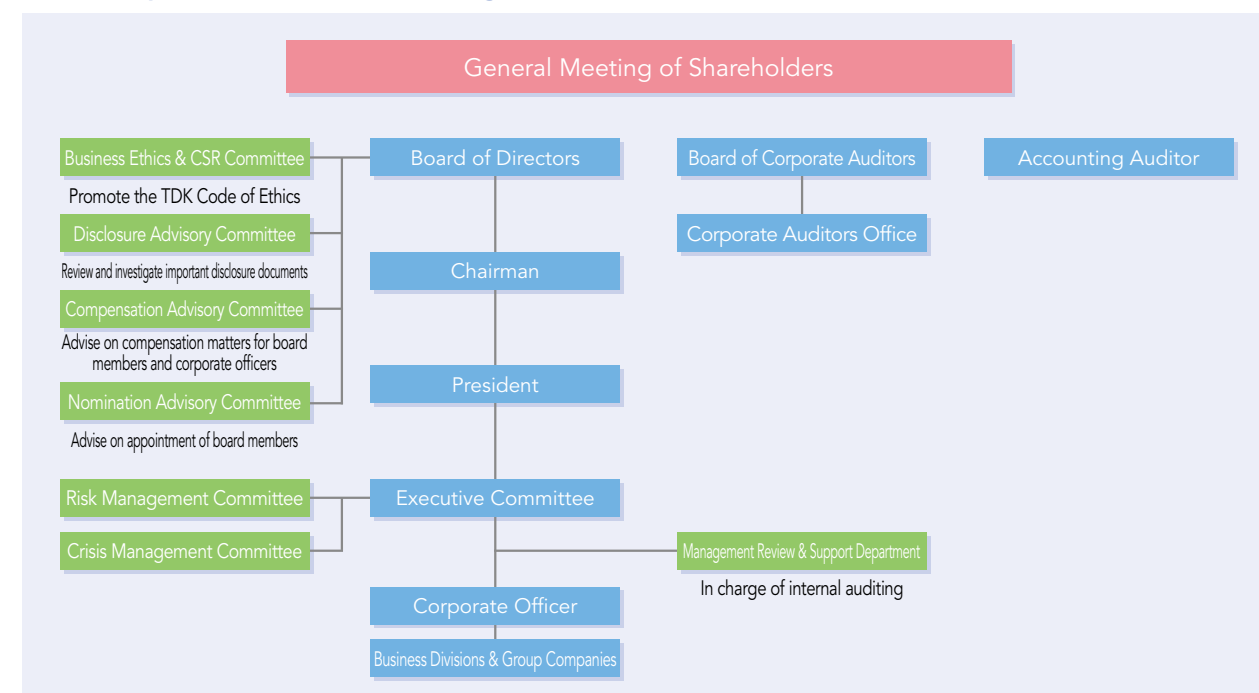
## Outline of TDK Corporate Governance Organization

TDK has established the below-mentioned management system to maintain compliance, transparency and soundness in conducting business operations and to achieve business objectives.

## Outline of TDK Management System

- 1 To strengthen the functions of the Board of Directors and strictly evaluate a Director's performance, the number of Directors is limited to seven, three disinterested outside Directors are appointed, and the term of a Director is set at one year.
- 2 The corporate officer system is adopted to separate decision-making/supervising functions from the operating function and enable rapid business operations.
- 3 The Board of Corporate Auditors (five Auditors in total) is established. Out of the five Auditors, three disinterested and independent outside Auditors are appointed to enhance the supervisory function for operations.
- 4 The Business Ethics & CSR Committee, the Disclosure Advisory Committee, the Compensation Advisory Committee, and the Nomination Advisory Committee are established as advisory bodies to the Board of Directors.

## TDK Corporate Governance Organization



## Compliance with SOX Act

The Sarbanes-Oxley Act (SOX) is a U.S. law enacted in 2002 and aimed at achieving strict internal control. TDK has been complying with its requirements by establishing internal control systems across the entire company based on the COSO control framework, and by continuously upgrading and improving these systems. Since we have delisted our stock from the U.S. Stock Exchange in April 2009, we will be changing over to the internal control requirements of the Japanese Financial Instruments and Exchange Act, Article 24 (which can be considered as the Japanese equivalent of SOX). However, the internal control systems established for compliance with the U.S. SOX Act will be retained and further strengthened within the group.

## Enterprise Risk Management (ERM) Framework

To deal appropriately with possible risks involving its business activities, the TDK Group has implemented an Enterprise Risk Management (ERM) framework. We established a Risk Management Committee reporting directly to the Executive Committee and headed by an executive vice president. In 2008, we began a company-wide drive to identify risks, in particular those that are significant to business operations and the achievement of business objectives. The framework is aimed at effectively containing and minimizing such risks.

## Information Security

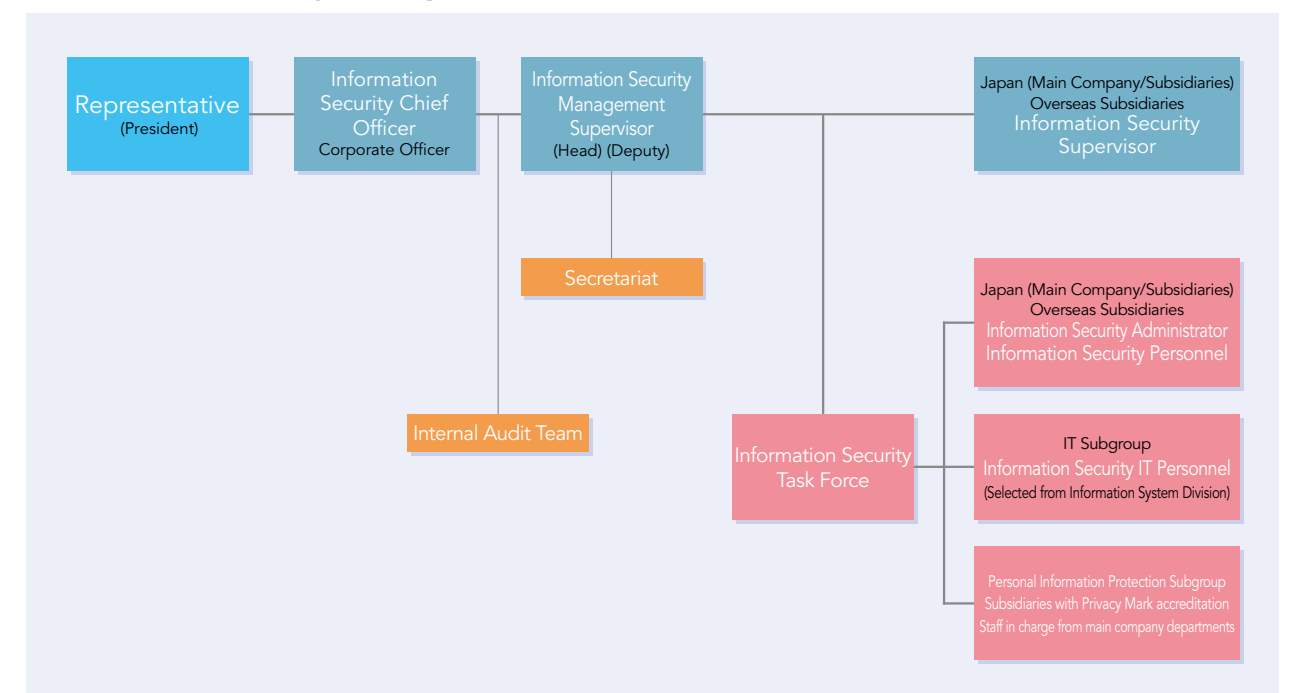
In July 2005, TDK established an information security policy which forms the basis for our active engagement in this area. The main activities as listed below together form our information security management framework.

- Exercise tightened control of data and other information obtained from customers as well as confidential business information
- Operate Information Security Management System (ISMS) certified on December 2005, centered around TDK information system functions
- Implement provisions of Japanese Personal Information Protection Law (in full force since April 2005)



e-Learning training sessions are held regularly in order to promote proper awareness of information security among all staff members.

## Information Security Management Framework



The TDK Group exists thanks to its stakeholders. We are constantly thinking about what is expected of us, and how we can deliver even better value. We will continue our quest for a mutually beneficial relationship with all our stakeholders.

## Customer Relations

Corporate Profile → CSR Activities → Customer Relations (Quality Assurance) [http://www.tdk.co.jp/csr\\_e/csr02100.htm](http://www.tdk.co.jp/csr_e/csr02100.htm)

### TDK Quality Assurance

TDK strives to consistently deliver products that truly impress customers through their quality. This means that customer expectations are not only met but regularly exceeded, both with regard to the products and the services that we provide. The key to achieving this goal lies in the quality of our organization and of our human resources. In order to continuously refine and improve these, we enthusiastically engage in the following activities.

**Systematic Quality:** Activities to constantly assess and refine our organizational structures which are at the very core of quality assurance. Using IT tools to make processes transparent, such as when working out product development roadmaps and compiling database records of past problems.

**Human Resource Quality:** Company-wide meetings of managers responsible for quality assurance, newsletters and training programs to widely disseminate knowledge of the best practices approach, and other quality drive activities are carried out to foster a thoroughly quality-oriented outlook. This extends to staff members involved in all processes of the company, including development, design, manufacturing, sales, and distribution. At the same time, we are incorporating quality related feedback from customers and from the market into our activities.

Based on our wish that future generations may live in safety and comfort, we are adopting the user perspective and always aim to create and deliver reliable products that are environment-friendly and that generate true customer satisfaction.



### Systematic Quality

#### TQS 9000 – Our Proprietary Quality Standard

The TQS 9000 standard is the result of merging the unique TDK quality management system with the ISO 9001 international standards. Guidelines were established in order to ensure uniformly high quality levels in all of our business divisions. The status of operations is constantly checked and diagnosed according to TQS 9000. The results inform our ongoing drive for further improvements, made possible by the lateral organization of the Quality Assurance framework.

#### Design review at each stage of new product development

Before any new product is launched onto the market, a variety of quality assurance measures are taken. Above all, design reviews are an indispensable step to realize high quality. Not only do these reviews identify individual problems at each stage of development from conception to the final trial production stage, they also prevent any quality-related problems ahead of the product entering mass production. In principle, design reviews entail the involvement not only of the Design and Development departments, but also the Quality Assurance Department and other concerned sections of the company. Rigorous design reviews are followed by repeated trial production and evaluation to methodically solve potential problems. The initial production control\* phase then follows, and new product development is only considered complete once all of these stages have been successfully completed.

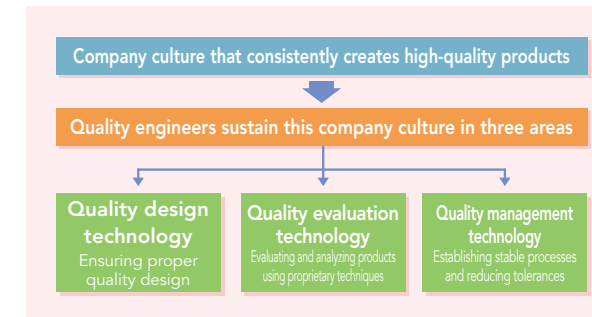
\*Initial production control: For a certain period after the start of mass production, a special control system is applied in order to detect latent or potential quality problems. The system is aimed to prevent problems from developing or spreading by providing early and effective solutions.



### Human Resource Quality

Quality engineers and technicians of course play a leading role in quality assurance activities. Their operations are divided into three major categories as depicted below. In order to consistently create and deliver high-quality products, a deep-rooted company culture must be sustained by skills that are constantly updated and improved. We are always aiming at skill improvement and are training specialists in the respective fields.

#### Fostering and improving the skill level of quality engineers



#### Comment from a quality engineer

As a quality engineer, my daily work involves the development of methods for evaluating the reliability of new products. This is aimed at producing high quality output and trying to prevent problems before they happen. I try to go to actual production sites as often as possible, in order to see conditions for myself and to communicate with the engineers and staff there. I believe that sharing information in this way helps us develop better methods. At the same time, we also apply trial and error techniques in order to improve the efficiency of product evaluation. I will continue to strive for even better and more meaningful evaluation methods, so that we can meet the high expectations and justify the trust that customers are placing in us. The end result is bound to be higher customer satisfaction.



Quality Assurance Department  
Reliability Evaluation Analysis Group  
Reliability Technology Section  
Katsuyuki Suzuki

### 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 both in Japan and overseas. 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.

#### Comment from a sales staff member

In my work in sales, I talk with customers every day and always try to find out what their needs and expectations are. This is important because it can lead to new proposals and projects. It is not always easy to meet customer expectations, but by working together both with our clients and with the various departments in our company, problems can be overcome. When I find that I have been able to build a relationship based on trust, I feel rewarded in my work. Also in future, I want to be able to offer customers not only product quality but also added value. It's simply great when we get feedback such as "We are really happy that we went with TDK."



Electronic Components  
Sales & Marketing Group  
Sales Division 2  
Tomoharu Furukawa

### 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, environmental efforts and services, in order to become the company of choice for potential customers.

### Customer Recognition of TDK Quality

Some examples of customers recognizing our quality-oriented operations are mentioned below. This kind of recognition is an incentive for our ongoing drive to further improve quality levels.

- NEC Corporation Carrier Network Business Unit, Mobile Network Operations Unit:  
Received "FY2008 Excellent Supplier Award"
- NEC Wireless Networks, Ltd.:  
Received an award for seven semiannual terms in a row



# Supplier Relations

Corporate Profile → CSR Activities → Supplier Relations [http://www.tdk.co.jp/csr\\_e/csr02200.htm](http://www.tdk.co.jp/csr_e/csr02200.htm)

## Purchasing Policy

Under its "Global Partnership Purchasing" principle, TDK strives to build strong relations with suppliers on a win-win basis that benefits both sides. Global Partnership Purchasing means that TDK not only has manufacturing bases in Japan, the rest of Asia, as well as in North America and Europe, we also build our supplier network with a global outlook. Close collaboration with

quality-oriented suppliers allows us to speedily develop the products that our customers need, and to ensure that these products are up to our high standards for customer satisfaction.

Based on these principles, we actively pursue the following objectives.

## Global Partnership Purchasing Principle

### TDK's Purchasing Principles

#### Compliance

All applicable laws and regulations are followed in purchasing activities. Moreover, TDK strives not only to follow the letter of the law, but its spirit as well.

#### Respect for Human Dignity

TDK respects the human dignity of workers who are active in all stages of the supply chain.

#### CSR

The procurement divisions of the TDK Group implement CSR activities on a continuous basis, while performing evaluations of suppliers at regular intervals using the CSR Check Sheet, to promote understanding of our CSR concept and raise recognition of our initiatives.

#### Green Procurement

As one aspect of its company wide environmental protection activities and in the pursuit of harmony with the global environment, TDK engages in green procurement, i.e., the purchase of environment-conscious products.

#### Fair and Open Business

TDK conducts fair business regardless of company size or nationality. TDK bases its purchasing decisions on comprehensive evaluations of quality, price, delivery time, ability to provide a stable supply, and other factors.

#### Partnership

TDK seeks to build mutually beneficial relationships with suppliers based on shared goals.

#### VA\* Activities

TDK recognizes suppliers that can lower costs and provide new materials and technologies through VA activities.

#### IT Utilization

Information exchanges with suppliers using IT and networks are essential for accelerating the pace of business and reinforcing ties.

#### Quality, Delivery Time and Stable Supply

TDK always considers quality, delivery time and stable supply by establishing solid partnerships with its suppliers.

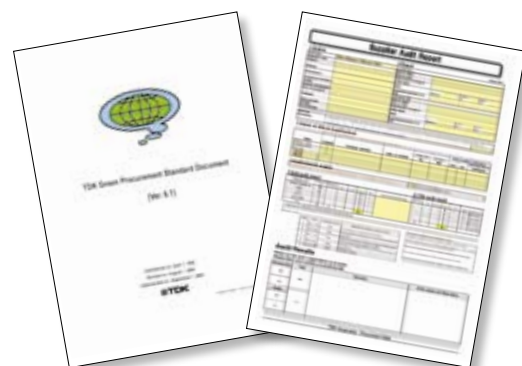
\*VA: Abbreviation of "Value Analysis," often used in a similar meaning as "Value Engineering" (VE). Describes a new methodical approach to reducing costs, formulated in the U.S. in 1946. Product value is analyzed from various angles in order to obtain the desired functionality while minimizing the cost of materials and resources.

## Supplier Evaluations

As a rule, supplier evaluations are carried out once every three years, in order to ascertain that the relationship is sound and should be continued. This is based on a diagnostic approach. First, the supplier is asked to provide self-evaluation on 89 items, divided into the categories "Chemical Substances\*," "Quality," "Cost," "Delivery Time," "Environmental Conservation," and "Management." After receiving the responses, our staff members visit the supplier and carry out their own evaluation. If any problems are detected, we provide proposals for corrective actions and required action items, in order to work towards a solution.

In 2008, TDK evaluated 184 supplier companies in Japan and 146 companies overseas.

\* Survey items for chemical substances are based on the "TDK Green Procurement Standards." The standards are available at the following URL. [http://www.tdk.co.jp/proc\\_e/pro30000.htm](http://www.tdk.co.jp/proc_e/pro30000.htm)



## CSR and Procurement

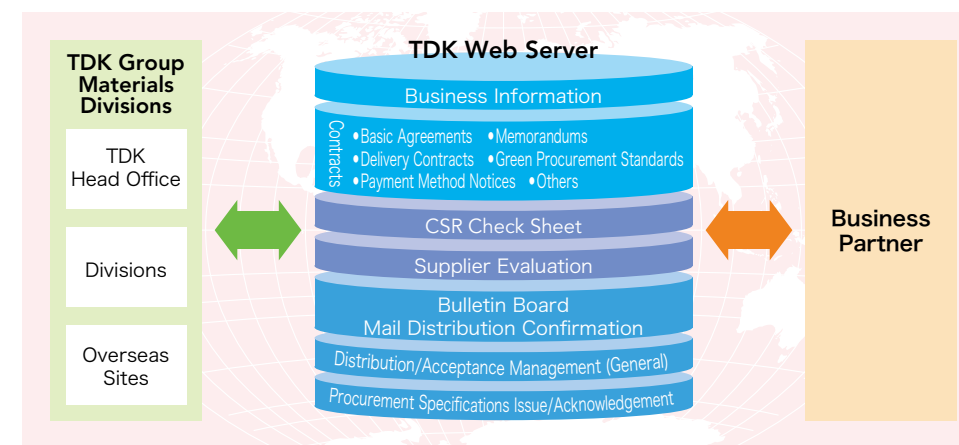
"CSR Procurement" as described in the TDK Purchasing Policy represents an important aspect of our procurement activities. Because we are a manufacturer of parts and components, we implement CSR from the point of view of a supplier. Similarly, we expect our suppliers and business partners to meet their CSR obligations as well. A supplier meeting held in September 2007 stressed the importance of CSR and promoted a thorough understanding of the concept among all participants. We also aim for recognition of and cooperation with our CSR initiatives.

Under the "Supplier Partnership System\*," we obtain responses using the CSR Check Sheet. The check sheet comprises 48 points which were selected from

among 342 items in the Supply Chain CSR Promotion Guidebook published by the Japan Electronics and Information Technology Industries Association (JEITA). The points are mainly related to the areas of human rights and labor relations, safety and health, as well as fair trade and ethics, which are of special concern to us. In order to raise awareness and provide the motivation for active involvement, the check sheet is designed so that results are shown directly on screen when responding to a question.

As of the end of March 2008, about 2,300 business partners in Japan and about 1,100 business partners overseas had provided responses. In future, the results are to be shared among TDK and its business partners, in order to jointly work out action plans for making improvements.

## Supplier Partnership System



\*Supplier Partnership System: A web-based system for consolidated management of business information, distribution of procurement specifications, and shared management of contracts and other data which conventionally were kept as paper-based documents or stored on magnetic media. This enables the implementation of speedier and more efficient business processes.

## Green Purchasing

In April 1999, we formulated our Green Procurement Standards. Based on these standards, we investigate the environmental management practices of suppliers and the environment friendliness of materials to be purchased, thereby promoting our green purchasing efforts. In February 2004, in an effort to adhere to various environmental measures around the world, such as the Restriction of Hazardous Substance (RoHS) Directive, as well as to better meet customer demands, we revised our Green Purchasing Standards and put them on our web site.



We issued our Green Procurement Standard Ver. 6 in June 2009 and have distributed the standard to all our suppliers. Materials to be purchased are evaluated in three categories: chemical substances, parts, and packaging materials. The revised Green Procurement

Standard Ver. 6 specifies items to be examined.

In consideration of the accuracy and effectiveness of the self-evaluation checks of our suppliers, and in compliance with the Joint Industry Guide (JIG), the result of an agreement among the industry groups of Japan, the United States, and Europe, 34 chemical substance groups are investigated in the evaluation, namely 24 Level A prohibited substances and 10 controlled substances.

Our purchased material master datasheet is linked to data conforming to our green procurement standards, to ensure that none of our products contains any hazardous substances.

## Future Targets

Along with the consolidation of our strategic management objectives, the number of business partners will also undergo a change. We are making preparations to promote extended cooperation with our purchasing policy and principles also among the business partners of the TDK Group companies. This is intended to ensure that purchasing activities throughout the group are optimized with the cooperation of all parties.

# Employee Relations (Employment and Human Resources)

Corporate Profile → CSR Activities → Employee Relations (Employment and Human Resources) [http://www.tdk.co.jp/csr\\_e/csr02300.htm](http://www.tdk.co.jp/csr_e/csr02300.htm)

## Basic Personnel Policies

We regard our employees as one of our most important assets for achieving the corporate motto. Our basic principle concerning personnel holds that the development of human resources is the source of true prosperity for the company. We are therefore promoting a variety of measures aimed at creating an environment and mechanism wherein we respect each employee's individuality, and each employee can spontaneously expand his or her abilities and potential to the greatest possible extent.

### What we aim for

- People who have vision and demonstrate creative and constructive powers
- People who have courage and take the initiative when confronting problems
- People who are trustworthy and possess a spirit of honesty and service

## Employee Data

Non-consolidated and consolidated employee numbers (by gender)

Non-consolidated employee numbers: male 4,744, female 734, total 5,478  
Consolidated employee numbers: 66,429

### Employees by region

| Region | Number of Employees | Region             | Number of Employees |
|--------|---------------------|--------------------|---------------------|
| Japan  | 10,572              | Asia (excl. Japan) | 46,556              |
| U.S.   | 2,802               |                    |                     |
| Europe | 6,499               | Total              | 66,429              |

## Overview of TDK's Personnel System

The evaluation and compensation system that forms the foundation of our personnel system is based on a self-management system, which focuses on discovering talent and achieving results. Our self-management system is not merely an evaluation system, but a system whose main purpose is to increase each individual employee's abilities, self-determination and sense of participation. The system also aims to improve communication between employees and their superiors.

- Foster and improve the potential of each and every employee
- Foster independent thinking and a sense of involvement
- Strengthen the channels of communication between superiors and subordinates



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

Our goal of human resources development is nurturing such self-sustained employees. A self-sustained employee is defined as someone who is conscious of problems and attempts to find the best solution, someone who actively takes on difficult challenges and is able to cope with changes, someone who pursues their vision to the full conclusion. TDK's programs to develop and cultivate abilities include training programs tailored to every level of employment, and training for prospective leaders, aiming at acquiring knowledge on how to become self-sustained in their work in stages starting from newly hired staff. We also have specialized education programs on professional expertise required for each position, such as technology, quality control and patents, postings outside the company; training for those to be stationed abroad and language training; and a capability development support system (incentive system for completing certification and correspondence education).

Selective training programs include IMD (International Management Development) Seminars aimed at training manager candidates for overseas subsidiaries, the Innovative Leader Development Forum for fostering young leaders, and the "Soshunjuku" and "Zohaku-juku" programs designed to groom candidates for next-generation management. The "Zohakujuku" program was revamped in fiscal 2009, extending the program period from one to two years. New content was added, focusing on essential qualities for management leaders,

### TDK Talent Development and Training Programs

|   |   |  |
|---|---|--|
| Training programs on different levels                         | <ul style="list-style-type: none"> <li>• Leadership development training</li> <li>• Follow-up training for new project leaders</li> <li>• Project leader candidates assessment training</li> <li>• New administrator training</li> <li>• Mid-level employee career planning program</li> <li>• Third-year training</li> </ul> | <ul style="list-style-type: none"> <li>• Practical sales training</li> <li>• Designated support leader program</li> <li>• New employee training</li> <li>• Pre-hire employee training</li> <li>• Training for newly hired employee with prior experience</li> <li>• Training programs on different levels for employees of affiliated companies</li> </ul> |
| Training for prospective leaders                              | <ul style="list-style-type: none"> <li>• "Zohakujuku"</li> <li>• Innovative leader development forum</li> </ul>   | <ul style="list-style-type: none"> <li>• "Soshunjuku"</li> <li>• IMD training</li> </ul>   |
| Specialized education programs                                | <ul style="list-style-type: none"> <li>• Overseas supervisor training</li> <li>• Department specific training (Development/Intellectual Property/Quality/Sales/Materials/Accounting)</li> </ul>   | <ul style="list-style-type: none"> <li>• Overseas posting preparatory training</li> <li>• Craftsmanship training</li> <li>• Language training</li> </ul>   |
| Talent development support and qualification support programs | <ul style="list-style-type: none"> <li>• System of incentives for obtaining professional certification</li> <li>• Correspondence courses</li> </ul>   | <ul style="list-style-type: none"> <li>• Overseas study program</li> </ul>   |

\* As for further information of main training programs, please refer the web site.

such as determination and will power, internal strength and sense of mission, and improved viewpoints.

Beginning in fiscal 2010, three-way discussions between participants, members of management, and seminar lecturers are also implemented. Also after the course is finished, training at the workplace is slated to continue.

### Comments from participants

#### Designated support leader seminar, May 2009

- "It was good being able to talk with colleagues about some of the problems we are facing."
- "The group discussion was highly informative, because I could hear the opinions of other support leaders."
- "The comments by others in the group discussion made me see things in a new light."

## Organizational Structure for Maximizing the Potential of Each Employee (Human Resources Organization)

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

- Active In-house Hiring System
- Career Option System
- Self-Determined Reporting System
- Annual Salary System for Project Managers
- Bonus for Contributing to Important Themes
- Free Time and Flextime Systems

\* As for further information of each system, please refer the web site.

## Respecting the Individual and Providing a Worry-Free Work Environment

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

In 2002, we established the TDK Code of Ethics\* to serve as an important acting principle for both employees and members of management to follow. Respect for human rights is an important element of this code.

We have undertaken a number of specific efforts to respect human rights and ensure equal opportunity, including efforts to educate and enlighten employees, the establishment of a special telephone "help line" for consultations, and various systems related to child care and caregiver concerns (including child care, the care leave system, and a system permitting reduced working hours). We introduced the Diversity Action Promotion

Plan in the second half of fiscal 2008 as a new initiative to further promote these efforts and to recruit and utilize diversified human resources. Diversity Promotion committees have been established in each division, leading company-wide campaigns to provide more opportunities for female employees and retired workers.

\* As for the details of TDK Code of Ethics, please refer the following URL. <http://www.tdk.co.jp/teaaa01/aaa06000.htm>

### Numbers of Employees Taking Child Care Leave and Caregiver Leave (TDK)

| Employees taking child care leave | Employees taking caregiver leave |
|-----------------------------------|----------------------------------|
| 30                                | 0                                |

Note: FY 2009

### Comment from an employee about the childbirth/child care support system

Using the paid leave, maternity leave, and child care leave opportunities, I took over a year off work. Currently, I am still starting work 30 minutes late and end 30 minutes early, so that I can take my child to child care and pick her up again. I knew about the TDK system already from the time I joined the company and had imagined that I would return to work if I had child, but when I actually was in the situation, the decision was not an easy one to take, because I had to consider the burden on my family.

The most important thing in making use of the system is the understanding of one's superiors as well as cooperation by colleagues and family members. I kept in touch with my colleagues also during the time I was on leave, which eased the transition when I finally returned to work. In using the system, I realized again the importance of maintaining proper communication with people around me, letting them know where I stand, in order to ensure that everyone is on the same page.

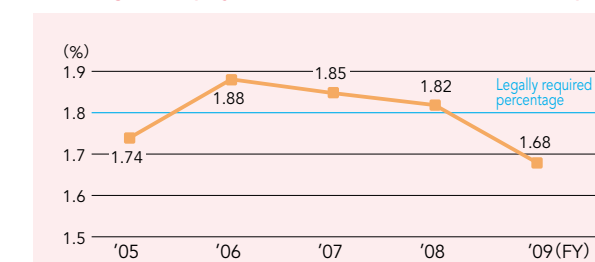


Electronic Components Sales & Marketing Group Advertisement Planning Department  
Naomi Shimokura

## Hiring People with Disabilities

The percentage of employees with disabilities at TDK was 1.68% for fiscal 2009, which unfortunately fell slightly short of the legally required level. Providing employment opportunities for persons with disabilities is an important concern of TDK, and we are implementing a number of plans for concrete action, to create suitable workplaces and set numerical hiring targets.

### Percentage of Employees with Disabilities (TDK Parent Company)





# Employee Relations (Safety and Health)

Corporate Profile → CSR Activities → Employee Relations (Safety and Health) [http://www.tdk.co.jp/csr\\_e/csr02400.htm](http://www.tdk.co.jp/csr_e/csr02400.htm)

## TDK Safety and Hygiene Charter

The TDK Safety and Hygiene Charter was enacted in July 2003 and applies to every organization in the TDK Group throughout the world. The basic philosophy underlying the charter is outlined as follows: "In order for employees to perform their duties under the best conditions, the TDK Group recognizes that ensuring a safe and sanitary workplace environment is an important management issue, and it shall implement action with everyone's help toward the realization of such an environment."

## Promoting a 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 enhance product quality. It has been implemented at all TDK sites in Japan.

The Safety & Environment Office playing a leading role in the system, as well as several of our plants (Mikumagawa Plant, Shizuoka Plant, TDK Sagara) have obtained OHSAS 18001\* certification. 12 overseas sites also have obtained certification. (As of July 1, 2009)

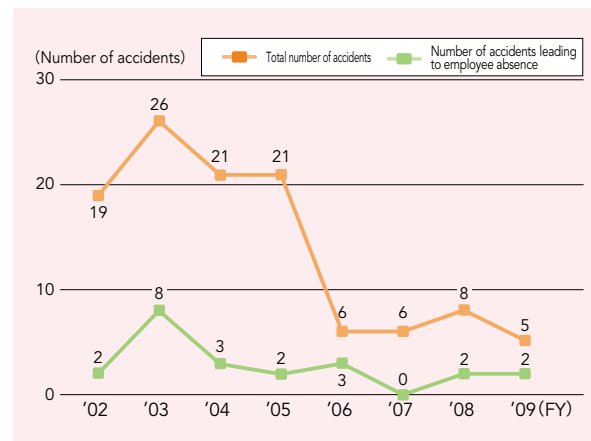


\* OHSAS 18001: Occupational Health and Safety Assessment Series created by an international consortium as standard specifications for managing health and safety in the workplace. The consortium consists of standards associations and evaluation organizations in Ireland, South Africa, and Britain.  
\* For a list of OHSAS 18001 certified sites, please refer the web site. [http://www.tdk.co.jp/csr\\_e/csr05200.htm](http://www.tdk.co.jp/csr_e/csr05200.htm)

## Occurrence of Accidents at Work

The following graphs show trends in workplace accidents at TDK. In fiscal 2009, there were five workplace accidents, three fewer than in the previous year. Only two of these resulted in absence from work.

Transition of the Occurrence of Accidents in the Workplace (Japan)



## Employee Health Management

To keep our staff healthy, we conduct physical examinations of employees on a regular basis. Furthermore, we 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.

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.

## 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. Since fiscal 2009, 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.

# Shareholders and Investor Relations

Investor Relations [http://www.tdk.co.jp/ir\\_e/index.htm](http://www.tdk.co.jp/ir_e/index.htm)

## Basic Policy on Disclosure of Information

The TDK Group maintains fairness and transparency through timely and accurate disclosure of certain information that is demanded by the general public, except confidential information. The TDK Group shall make efforts to identify types of information that are demanded by each group, including shareholders, investors, customers, suppliers, or employees. The TDK Group shall attempt to respond to any inquiries through the Corporate Communications, General Affairs, Sales & Marketing, Procurement and other related divisions in a fair and sincere manner.

Note: From Chapter 2, Corporate Standards of Business Conduct, TDK Code of Ethics

## Objectives of Investor Relations (IR) Activities

The objectives of TDK's investor relations (IR) activities are to develop long-term relationships of trust with stakeholders by fulfilling our responsibilities not only to shareholders, who have entrusted administration of the company to management, but also to all other stakeholders including investors and analysts through the faithful and fair disclosure of information, as well as to obtain their confidence and regard through bilateral communication.

In order to pursue these objectives at all times, we continuously disclose necessary information and conduct investor relations activities in such a manner that third-party opinions are used to improve management.

## Active Promotion of Investor Relations Activities

In consideration of the objectives of its IR activities, we believe that we must provide capital market participants (including shareholders, investors, and securities analysts) with accurate information that fully responds to their needs. This includes management strategies and business policies, among others.

To this end, we hold financial and other briefings, providing management with the opportunity to engage in direct dialog with capital market participants.

## Overview of IR Activities

Our IR web site seeks to provide business and financial information, management strategies and other material management information in an impartial and easy to understand manner. Specifically, quarterly earnings release conferences are relayed live or in recorded form through the web site in both Japanese and English.

We also issue a variety of printed publications, including the Annual Report that contains a message from management as well as financial results, and the Investors' Guide containing financial information for the past 11 years. These documents are issued annually in both Japanese and English. We also regularly issue the TDK TODAY newsletter which is mailed to our shareholders.



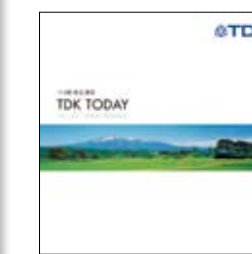
Web site



Annual Report



Investors' Guide



TDK TODAY



# Local Community Relations

Corporate Profile → CSR Activities → Local Community Relations [http://www.tdk.co.jp/csr\\_e/csr02700.htm](http://www.tdk.co.jp/csr_e/csr02700.htm)

## Basic Concept of Contributing to Society

TDK, recognizing its responsibility to act as a corporate citizen in harmony with the rest of society, promotes unique community activities aimed at contributing to society in a meaningful way.

### 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.

## 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.



**Electronics workshop**  
(TDK History Museum)

Since fiscal 2008, we have been conducting hands-on workshops for primary and junior high school students. In fiscal 2009, these were held both in the summer and the winter holidays, offering the opportunity to build IC radios and miniature cars powered by solar cells. About 260 students have so far taken part in the workshops.



**"Career Day" at a primary school**  
(TDK Components U.S.A., Inc.)

In March 2009, employees of TDK Components in the U.S. State of Georgia visited a local primary school on Career Day, giving a presentation to the students about their work, about the recycling and power saving efforts of their company, and about how the company complies with various regulations.



**Plant visit by primary school students**  
(TDK Ujo Corporation)

In November 2008, fifth graders from the local Okubo primary school paid a visit to the factory as part of their "Learning about Industry" class, to see for themselves how our products are made and how they are used.

## 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.



**Sponsorship of World Championship in Athletics**

TDK has been an IAAF Official Partner of men's bibs since the first IAAF World Championship in Athletics, held in Helsinki, Finland in 1983. It has been decided to continue this sponsorship until 2019.



**Bringing the world's greatest orchestras and students together (TDK Outreach Mini Concert)**

In November 2008, TDK organized a special mini concert by five wood wind players of the Berlin Philharmonics Orchestra at a Junior High School in Roppongi, Tokyo. Members of the school's wind orchestra were even able to play together with the visiting virtuosos.



**Baseball lessons for high school students (TDK Baseball Club)**

In January 2009, the TDK Baseball Club held a practice session for baseball club members from high schools in the Shonai region of Yamagata Prefecture. 36 students from 8 schools received training and instruction from six TDK club members.

## 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 harmonious coexistence of society with the global environment.



**Tree planting session**  
(TDK (Thailand) Co., Ltd.)

120 TDK employees helped to plant 600 trees in Thailand's Lop Buri Province in June 2008, to reduce the risk of flooding from a dam.



**Applying fertilizer to TDK Beechwoods**  
(TDK sites in the Akita area)

In June 2009, about 100 TDK Group employees participated in applying fertilizer and weeding the "TDK Beechwoods" located near Mt. Chokai in Akita Prefecture.



**Midosuji cleanup campaign**  
(Osaka Branch Office)

Since fiscal 2007, staff members have been carrying out clean-up activities in the vicinity of their office on certain days for about 30 minutes before starting work. During fiscal 2009, this was done eight times, with a combined total of 135 persons participating.

## 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 overcoming various challenges in local communities, in order to realize a better society.



**Making heliport available for medical emergency helicopter** (Mikumagawa Plant)

Since autumn 2008, the helicopter takeoff/landing facility within the site is being made available as a heliport for medical helicopter services. This is used not only in emergencies but also when patients require transport to medical facilities with special equipment.



**Blood donation drive** (Magnecomp Precision Technology Public Company Limited)

Starting in 2003, TDK has been conducting a blood donation drive four times per year on its site, for the benefit of the Red Cross Society of Thailand under the cooperation of the Ayutthaya Red Cross. About 85 employees donate blood each time. So far, more than 400,000 cc of blood have been collected.



**Environment topic meeting with local citizens** (Asama Techno Factory)

In December 2008, a meeting about environmental topics was held for residents of the local Nishiyashiki area. 12 participants were given an overview of the plant and its products, and received detailed information about the handling of industrial waste.



# Environmental Report

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 the sustainable development of society. In line with the Charter, TDK formulated the TDK Environmental Action 2015 plan as a fundamental framework for implementing specific environmental activities.

## Environmental Policy and Environmental Vision

[Corporate Profile](#) → [CSR Activities](#) → [Environmental Policy and Environmental Vision](#) [http://www.tdk.co.jp/csr\\_e/csr03100.htm](http://www.tdk.co.jp/csr_e/csr03100.htm)

### TDK Environmental Charter

This environmental charter applies to every organization in the TDK Group worldwide.

#### Basic Principle on the Environment

The TDK Group recognizes care for the global environment as an important management issue and is committed to help bring about a sustainable society through the combined efforts of all of its members in all business operations.

#### Basic Policy on the Environment

Based on this principle, the TDK Group enlists the participation of all of its members to carry out environmental protection activities quickly and effectively, so that future generations may live in a healthier environment.

- 1 Build a framework for promoting activities to improve safety and hygiene, with clearly defined responsibilities, while the management shall provide necessary management resources for the realization of this policy.
- 2 Contribute to society by creating and supplying the market with life cycle oriented products and services.
- 3 Comply with local environmental rules and regulations in every region, establish the necessary self-imposed standards for meeting regulatory requirements and managing chemicals, and improve the level of management.
- 4 Establish an effectively functioning environmental management system, implement environmental policy, set environmental objectives and targets and carry them out, as well as aim to reduce the environmental burden on a continuous basis and prevent pollution.
- 5 Carry out regular environmental audits and continuously improve the environmental management system and environmental performance.
- 6 Disclose information on environmental activities to maintain appropriate communication with local communities and society.
- 7 Actively participate in environmental activities run by governments and local communities.
- 8 Review environmental policy, environmental objectives and targets, and environmental management system periodically and as necessary.

This Environment Charter is available for anyone if desired.

Established March 1, 1993 / Revised September 1, 2006 (version 4)

## Environmental Vision (TDK Environmental Action 2015)

TDK believes that a fundamental environmental plan designed from a long-term perspective is necessary to achieve the sustainable development of society and a recycling-oriented society. In 2002, TDK therefore formulated the "TDK Environmental Action 2010." This plan was comprehensively revised in December 2005, incorporating new long-term goals and global development of our environmental activities. Now called "TDK

Environmental Action 2015," the plan includes a new long-term roadmap with a distinctly global focus, and spells out five specific objectives. Company-wide efforts to achieve these objectives are now in place.

By making annual reviews of action items and related numerical targets based on past performance, TDK aims to promote environmental activities on an ever higher level.

From 2009, some of the action items were modified in order to implement concrete activities at TDK sites with the environmental management system.



#### Until FY 2009

- 1 Improving the Environmental Management System
- 2 Preventing Global Warming
- 3 Managing Waste
- 4 Managing Environmental Risks
- 5 Promoting the Creation of Environment-Conscious Products

#### From FY 2010

- 1 Preventing Global Warming
- 2 Managing Waste
- 3 Managing Environmental Risks
- 4 Conducting External Environment Activities
- 5 Promoting the Creation of Environment-Conscious Products

## Protecting Nature and Biodiversity

In order to make its products, TDK uses various metals and oxides. These raw materials come from mineral ore and other sources mined all over the world. As is well known, mining involves the risk of damage to the environment, including landscape damage, excessive clearing of forests, changes in water sources, and possible effects on ecosystems. Once damage has been done to an ecosystem, it usually cannot be recovered. As a manufacturer of components, we cannot simply stop using raw materials, but we can try to mitigate adverse effects. We do this by engaging in activities such as tree planting, reforestation, water source protection, and more.

We are also aware that our components are found in many kinds of office equipment that use paper and thereby indirectly contributing to the use of tree resources. This is why we attach particular importance to tree planting and reforestation activities.

However, our components are also utilized extensively in sophisticated video and recording

equipment. We believe that one of the basic human aspirations is to record the beauty and mysteries of nature, and the life of the plant and animal kingdom around us. TDK therefore is engaged in various drives to protect nature for future generations.

All staff members of our organization are aware of the impact that industrial production inescapably has on the environment. We think about the complex interrelationship between business operations and the environment, and are keen to do our part in protecting the global beauty of nature.

Note: For Major source of information on our nature protection activities, Please refer the web site.  
[http://www.tdk.co.jp/csr\\_e/csr05300.htm](http://www.tdk.co.jp/csr_e/csr05300.htm)

# Targets and Results

Corporate Profile → CSR Activities → Targets and Results [http://www.tdk.co.jp/csr\\_e/csr03200.htm](http://www.tdk.co.jp/csr_e/csr03200.htm)

## TDK Environmental Action 2015–Agenda (FY 2010 and Medium and Long Term Objectives and Targets)

Established: April 1, 2006  
Revised: April 1, 2009 (03)

| Objectives   | FY 2010 Targets  |        |   | Medium Term<br>(by March 2011)   | Long Term<br>(by March 2016)   |   |
|--|--|--------|---|--|--|---|
|  | Scope  | Target | Major Measures  |  |  |   |
| 1 Preventing Global Warming                                | (1) Production sites   | Global | <ul style="list-style-type: none"> <li>Reduce CO<sub>2</sub> emissions by 4% or more from the FY 2006 level</li> </ul>  | <ul style="list-style-type: none"> <li>Improve energy consumption per unit of products by 2.0% or more year on year</li> <li>Reduce fixed energy consumption by 1.0% or more year on year</li> <li>Set and strictly observe voluntary CO<sub>2</sub> emission limits and targets</li> </ul>  | <ul style="list-style-type: none"> <li>Reduce CO<sub>2</sub> emissions by 5% or more from the FY 2006 level</li> </ul>   | <ul style="list-style-type: none"> <li>Reduce CO<sub>2</sub> emissions by 10% or more from the FY 2006 level</li> </ul>                       |
|  |  | Japan  | <ul style="list-style-type: none"> <li>Reduce CO<sub>2</sub> emissions by 3% or more from the FY 1991 level</li> </ul>  | <ul style="list-style-type: none"> <li>Set and strictly observe voluntary CO<sub>2</sub> emission limits and targets</li> <li>Reduce fixed energy consumption by improving production methods and facilities</li> </ul>  | <ul style="list-style-type: none"> <li>Reduce CO<sub>2</sub> emissions by 12% or more from the FY 2006 level (Reduction of 7% or more from the FY 1991 level)</li> </ul>   | <ul style="list-style-type: none"> <li>Reduce CO<sub>2</sub> emissions by 20% or more from the FY 2006 level</li> </ul>                       |
|  | (2) Distribution   | Global | <ul style="list-style-type: none"> <li>Reduce CO<sub>2</sub> emissions in distribution (Set target for March 2011)</li> </ul>   | <ul style="list-style-type: none"> <li>Assess and review the amount of CO<sub>2</sub> emissions</li> </ul>   | <ul style="list-style-type: none"> <li>Set reduction targets</li> </ul>  | <ul style="list-style-type: none"> <li>Achieve reduction targets</li> </ul>   |
|  |  | Japan  | <ul style="list-style-type: none"> <li>Reduce CO<sub>2</sub> emissions by 3% or more from the FY 2007 level</li> </ul>  | <ul style="list-style-type: none"> <li>Improve energy consumption per unit of products by 1.0% or more year on year</li> </ul>   | <ul style="list-style-type: none"> <li>Reduce CO<sub>2</sub> emissions by 4% or more from the FY 2007 level</li> </ul>   | <ul style="list-style-type: none"> <li>Reduce CO<sub>2</sub> emissions by 5% or more from the FY 2007 level</li> </ul>                        |
| 2 Managing Waste   | Global   | Global | <ul style="list-style-type: none"> <li>Reduce total waste emissions by 3% or more from the FY 2006 level</li> </ul>   | <ul style="list-style-type: none"> <li>Maintain zero emissions</li> <li>Improve outsourced recycling index by 1.0% or more year on year</li> <li>Promote recycling to produce valuable resources</li> </ul>  | <ul style="list-style-type: none"> <li>Reduce total waste emissions by 4% or more from the FY 2007 level</li> </ul>  | <ul style="list-style-type: none"> <li>Reduce total waste emissions by 5% or more from the FY 2007 level</li> </ul>                           |
|  |  | Japan  | <ul style="list-style-type: none"> <li>Reduce total waste emissions by 3% or more from the FY 2007 level</li> </ul>   | <ul style="list-style-type: none"> <li>Improve outsourced recycling index by 1.0% or more year on year</li> </ul>  | <ul style="list-style-type: none"> <li>Reduce total waste emissions by 4% or more from the FY 2007 level</li> </ul>  | <ul style="list-style-type: none"> <li>Reduce total waste emissions by 10% or more from the FY 2007 level</li> </ul>                          |
| 3 Managing Environmental Risks                             | (1) Manage Environmental Risks   | Global | <ul style="list-style-type: none"> <li>Reduce or continue to contain environmental risks</li> </ul>   | <ul style="list-style-type: none"> <li>Implement measures for environmental risk management</li> </ul>   | <ul style="list-style-type: none"> <li>Reduce or continue to contain environmental risks</li> </ul>  | <ul style="list-style-type: none"> <li>Reduce or continue to contain environmental risks</li> </ul>   |
|  |  | Japan  | <ul style="list-style-type: none"> <li>Reduce atmospheric VOC emissions by 30% or more from the FY 2001 level</li> </ul>  | <ul style="list-style-type: none"> <li>Reduce atmospheric VOC emissions by 30% or more from the FY 2001 level (introducing facilities, improving processes and controlling waste generation)</li> </ul>  | <ul style="list-style-type: none"> <li>Reduce atmospheric VOC emissions by 30% or more from the FY 2001 level by FY 2011</li> </ul>  | <ul style="list-style-type: none"> <li>Reduce atmospheric VOC emissions according to newly set targets (Targets to be set in 2011)</li> </ul> |
| 4 Conducting External Environment Activities               | (1) Social Contribution Activities   | Global | <ul style="list-style-type: none"> <li>Carry out social contribution activities</li> </ul>  | <ul style="list-style-type: none"> <li>Implement environmental actions matched to local needs</li> <li>Implement educational activities to raise environmental awareness and future-oriented thinking</li> </ul>   | <ul style="list-style-type: none"> <li>Continue social contribution activities</li> </ul>  | <ul style="list-style-type: none"> <li>Continue social contribution activities</li> </ul>   |
|  |  | Global | <ul style="list-style-type: none"> <li>Strictly observe all laws and regulations</li> <li>Accommodate revision of Chemical Substances Control Law (Japan only)</li> </ul>                     | <ul style="list-style-type: none"> <li>Implement preventive management based on self-managed standards</li> <li>Assess quantities of substances requiring registration</li> </ul>  | <ul style="list-style-type: none"> <li>Intensify implementation of preventive management</li> <li>Assess quantities of substances requiring registration</li> </ul>  | <ul style="list-style-type: none"> <li>Intensify implementation of preventive management</li> </ul>   |
| 5 Promoting the Creation of Environment-Conscious Products | (1) Strictly observe all regulations related to chemical substances used in products (REACH regulation compliance) | Global | <ul style="list-style-type: none"> <li>Implement product environment management in compliance with RoHS, REACH, and other international regulations related to chemical substances</li> </ul> | <ul style="list-style-type: none"> <li>Establish chemical substances database</li> <li>Implement a chemical substances management database covering all steps from procurement to marketed product</li> <li>Implement green procurement in compliance with REACH regulation</li> <li>Promote use of alternatives and substitutes for substances with high environmental impact</li> <li>Update MSDS to GHS indication</li> </ul> | <ul style="list-style-type: none"> <li>Strictly observe regulations related to chemical substances in each country</li> <li>(1) REACH regulation</li> <li>(2) Chinese Measures for the Pollution Control of Electronic Information Products (Chinese RoHS) 2nd step</li> <li>(3) Revised Chemical Substances Control Law</li> <li>Update MSDS to 100% GHS indication (compliance management)</li> </ul>  | <ul style="list-style-type: none"> <li>Strictly observe regulations related to chemical substances in each country</li> </ul>                 |
|  |  | Global | <ul style="list-style-type: none"> <li>Life cycle assessment (LCA)</li> <li>Establish new standard and perform evaluation</li> </ul>  | <ul style="list-style-type: none"> <li>Establish a new standard for life cycle assessment (LCA)</li> <li>Implement LCA for major products</li> <li>Make TDK products compliant with EuP directive</li> </ul>   | <ul style="list-style-type: none"> <li>Promote reduction of environmental load during life cycle of product</li> <li>(1) Assess carbon footprint</li> <li>(2) Assess GHG (greenhouse gases) evaluation</li> </ul>  | <ul style="list-style-type: none"> <li>Promote reduction of environmental load during life cycle of product</li> </ul>                        |
|  |  | Global | <ul style="list-style-type: none"> <li>Disclose environmental information on products to fully meet customer requirements</li> </ul>  | <ul style="list-style-type: none"> <li>Expand information disclosure and sales of Eco Love products</li> <li>Disclose information about Substances of Very High Concern (SVHC) in accordance with REACH regulation</li> <li>Comply with environmental load information disclosure in accordance with EuP Directive</li> <li>Participate in information propagation activities in the industry</li> </ul>                         | <ul style="list-style-type: none"> <li>Disclose environmental information on products to fully meet customer requirements</li> <li>(1) Disclose information about Substances of Very High Concern (SVHC) in accordance with REACH regulation</li> <li>(2) Comply with environmental load information disclosure in accordance with EuP Directive</li> <li>(3) Ensure full participation in common industry platforms for information disclosure</li> </ul> | <ul style="list-style-type: none"> <li>Disclose environmental information on products to fully meet customer requirements</li> </ul>          |

## TDK Environmental Action 2015–Fiscal 2009 Results

| Objectives   | FY 2009 Targets                           |        |  | Results   |  |
|--|---|--------|--|---|--|
|  | Scope                                     | Target | Major Measures   |   |  |
| 1 Preventing Global Warming  | (1) Production sites                      | Global | <ul style="list-style-type: none"> <li>Reduce CO<sub>2</sub> emissions by 3% or more from the FY 2006 level</li> </ul>   | <ul style="list-style-type: none"> <li>Improve energy consumption per unit of products by 1.5% or more year on year</li> </ul>  | <ul style="list-style-type: none"> <li>CO<sub>2</sub> emissions increased by 10.1% from the FY 2006 level (3.8% increase from the FY 2008 level)</li> </ul>  |
|  |   | Japan  | <ul style="list-style-type: none"> <li>Reduce CO<sub>2</sub> emissions by 1% or more from the FY 1991 level</li> </ul>   | <ul style="list-style-type: none"> <li>Improve energy consumption per unit of products by 2.0% or more year on year (1.0% or more reduction year on year in fixed energy consumption)</li> <li>Reduce fixed consumption by improving production methods and facilities</li> </ul> | <ul style="list-style-type: none"> <li>CO<sub>2</sub> emissions increased by 5.9% from the FY 1991 level (5.5% decrease from the FY 2008 level)</li> </ul>   |
|  | (2) Distribution                          | Global | <ul style="list-style-type: none"> <li>Reduce CO<sub>2</sub> emissions in distribution</li> </ul>  | <ul style="list-style-type: none"> <li>Assess and review the amount of CO<sub>2</sub> emissions</li> </ul>  | <ul style="list-style-type: none"> <li>Consider global application of system to assess CO<sub>2</sub> emissions from product distribution</li> </ul>   |
|  |   | Japan  | <ul style="list-style-type: none"> <li>Reduce CO<sub>2</sub> emissions by 2% or more from the FY 2007 level</li> </ul>   | <ul style="list-style-type: none"> <li>Improve energy consumption per unit of products by 1.0% or more year on year</li> </ul>  | <ul style="list-style-type: none"> <li>CO<sub>2</sub> emissions decreased by 28.4% from the FY 2007 level (16.5% decrease from the FY 2008 level)</li> </ul>   |
| 2 Managing Waste   | Global                                    | Global | <ul style="list-style-type: none"> <li>Reduce total waste emissions by 2% or more from the FY 2007 level</li> </ul>  | <ul style="list-style-type: none"> <li>Maintain zero emissions</li> <li>Improve waste generation per unit of products by 1.0% or more year on year</li> <li>Promote recycling to produce valuable resources</li> </ul>  | <ul style="list-style-type: none"> <li>Total waste emissions decreased by 9.9% from the FY 2007 level (8.5% decrease from the FY 2008 level)</li> </ul>  |
|  |   | Japan  | <ul style="list-style-type: none"> <li>Reduce total waste emissions by 2% or more from the FY 2007 level</li> </ul>  | <ul style="list-style-type: none"> <li>Improve outsourced recycling index by 1.0% or more year on year</li> <li>Promote recycling to produce valuable resources</li> </ul>  | <ul style="list-style-type: none"> <li>Total waste emissions decreased by 11.0% from the FY 2007 level (14.3% decrease from the FY 2008 level)</li> </ul>  |
| 3 Managing Environmental Risks (Reduction of atmospheric VOC emissions)  | Japan                                     | Global | <ul style="list-style-type: none"> <li>Reduce atmospheric VOC emissions by 28% or more from the FY 2001 level</li> </ul>   | <ul style="list-style-type: none"> <li>Implement voluntary action plan (introducing facilities, improving processes and controlling waste generation)</li> </ul>  | <ul style="list-style-type: none"> <li>Reduce atmospheric VOC emissions by 33% or more from the FY 2001 level</li> </ul>   |
|  |   | Global | <ul style="list-style-type: none"> <li>Risk management of chemical substances (Compliance with national and international laws and regulations and REACH)</li> </ul> | <ul style="list-style-type: none"> <li>Establish chemical substances database</li> <li>Update MSDS (reflect the situation in each country)</li> <li>Consider system for information disclosure on chemical substances in products (in compliance with REACH)</li> </ul>           | <ul style="list-style-type: none"> <li>Complete the creation of a database for procured chemical products</li> <li>Implement GHS information propagation for all domestic suppliers (chemical products)</li> <li>Target: 100% up-to-date by 2011</li> </ul>  |
| 4 Promoting the Creation of Environment-Conscious Products (Operation of product environmental management systems) | (1) Procurement (Suppliers)               | Global | <ul style="list-style-type: none"> <li>Reduce environmental load of products throughout their life cycles</li> </ul>   | <ul style="list-style-type: none"> <li>Establish new standard for life cycle assessment (LCA)</li> <li>Implement LCA for major products</li> </ul>  | <ul style="list-style-type: none"> <li>Take a major role in compiling the "Electronic Component LCA Guide" issued by the Electronic Component Division of Japan Electronics and Information Technology Industries Association (JEITA)</li> <li>Publish standard LCI data for general electronic components listed below, derived from LCA Japan Forum</li> <li>Multilayer ceramic chip capacitors</li> <li>Multilayer inductors</li> <li>Chip fixed resistors</li> </ul> |
|  |   | Japan  | <ul style="list-style-type: none"> <li>Disclose environmental information on products to fully meet customer requirements</li> </ul>                                 | <ul style="list-style-type: none"> <li>Achieve 100% response rate for customer product environmental survey</li> <li>Disclose information in compliance with REACH regulation</li> <li>Establish company-internal briefing and discussion framework regarding REACH</li> </ul>    | <ul style="list-style-type: none"> <li>Maintain 100% response rate for customer product environmental survey</li> <li>REACH regulation: implemented information disclosure for EU market products on substances of very high concern (15 substances) published on October 28</li> </ul>  |
|  | (2) Design, development and manufacturing | Global | <ul style="list-style-type: none"> <li>Expand sales of environment-conscious products</li> </ul>   | <ul style="list-style-type: none"> <li>Produce a catalog (first edition) of environment-friendly products to stimulate sales</li> </ul>   | <ul style="list-style-type: none"> <li>Establish and publicized a new system to label TDK's environment-conscious products (Eco Love products), starting September 2008</li> </ul>   |

### Single Fiscal Year Targets

| Objectives                                      | FY 2009 Activity Targets |  | Results  |
|---|--------------------------|--|--|
|   | Scope                    | Priority objectives  |  |
| 5 Improving the Environmental Management System | Japan                    | <ul style="list-style-type: none"> <li>Assessment based on management assessment system</li> <li>Enhanced system and performance based on EMS assessment system</li> <li>(a) Compliance                             <ul style="list-style-type: none"> <li>Implement preventive management based on self-managed standards</li> <li>Set upper limits (average + 3σ) at 50% or less of statutory values</li> <li>Note: Maintain or improve current NOx and pH levels</li> </ul> </li> <li>(b) Environment-conscious communities                             <ul style="list-style-type: none"> <li>Actively participate in environmental conservation activities (at least 30% of employees)</li> <li>Conduct environmental interaction with local communities (hold an environment-related event at least once a year)</li> </ul> </li> <li>(c) Operation of EMS                             <ul style="list-style-type: none"> <li>Set and promote themes that are beneficial to the environment</li> <li>Configure and maintain effective energy management frameworks (evaluation points 95 or more, inclusion ratio 85% or more)</li> <li>Develop themes for environmental impact assessment on a CO<sub>2</sub> conversion basis</li> <li>Promote on-site performance audits</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>Assessment based on management assessment system</li> <li>Enhanced system and performance based on EMS assessment system</li> <li>(a) Compliance                             <ul style="list-style-type: none"> <li>One case where pollution levels exceeded the self-measured statutory values</li> </ul> </li> <li>(b) Environment-conscious communities                             <ul style="list-style-type: none"> <li>A total of 6,590 employees participated in various environmental conservation activities</li> <li>Participated in 65 local environmental conservation programs</li> </ul> </li> <li>(c) Operation of EMS                             <ul style="list-style-type: none"> <li>Performed activities and set themes at each TDK site</li> <li>Continued to configure and maintain energy management frameworks</li> <li>Continued to implement environmental impact assessment on a CO<sub>2</sub> conversion basis</li> <li>Performed on-site audits focusing on performance</li> </ul> </li> </ul>  |
|   | Over-seas                | <ul style="list-style-type: none"> <li>Assessment based on management assessment system</li> <li>Continuous improvement based on EMS</li> <li>(a) Compliance                             <ul style="list-style-type: none"> <li>Strictly adhere to laws and regulations</li> <li>Implement preventive management based on self-managed standards</li> </ul> </li> <li>(b) Environmental risk management                             <ul style="list-style-type: none"> <li>Identify chemical substances emitted to the environment</li> </ul> </li> <li>(c) Environment-conscious communities                             <ul style="list-style-type: none"> <li>Actively participate in environmental conservation activities</li> </ul> </li> <li>(d) Set and promote themes that are beneficial to the environment</li> <li>(e) Implement preventive management based on evaluation of soil risks</li> <li>(f) Implement OHSMS</li> </ul>   | <ul style="list-style-type: none"> <li>Assessment based on management assessment system</li> <li>Continuous improvement based on EMS</li> <li>(a) Compliance                             <ul style="list-style-type: none"> <li>One case where pollution levels exceeded the self-measured statutory values</li> <li>Implemented preventive management based on self-managed standards</li> </ul> </li> <li>(b) Environmental risk management                             <ul style="list-style-type: none"> <li>Assessed chemical substance emission quantities</li> </ul> </li> <li>(c) Environment-conscious communities                             <ul style="list-style-type: none"> <li>Actively participated in local environmental conservation activities</li> </ul> </li> <li>(d) Set and promoted themes that are beneficial to the environment</li> <li>(e) Implemented preventive management based on evaluation of soil risks</li> <li>(f) Implemented OHSMS                             <ul style="list-style-type: none"> <li>Implemented OHSMS at 11 new sites (4 sites obtained OHSAS 18001 certification)</li> </ul> </li> </ul> |



# Environmental Management System

Corporate Profile → CSR Activities → Environmental Management System [http://www.tdk.co.jp/csr\\_e/csr03300.htm](http://www.tdk.co.jp/csr_e/csr03300.htm)  
 Corporate Profile → CSR Activities → Environmental Risk Management [http://www.tdk.co.jp/csr\\_e/csr03400.htm](http://www.tdk.co.jp/csr_e/csr03400.htm)  
 Corporate Profile → CSR Activities → Outline of Environmental Load [http://www.tdk.co.jp/csr\\_e/csr03500.htm](http://www.tdk.co.jp/csr_e/csr03500.htm)

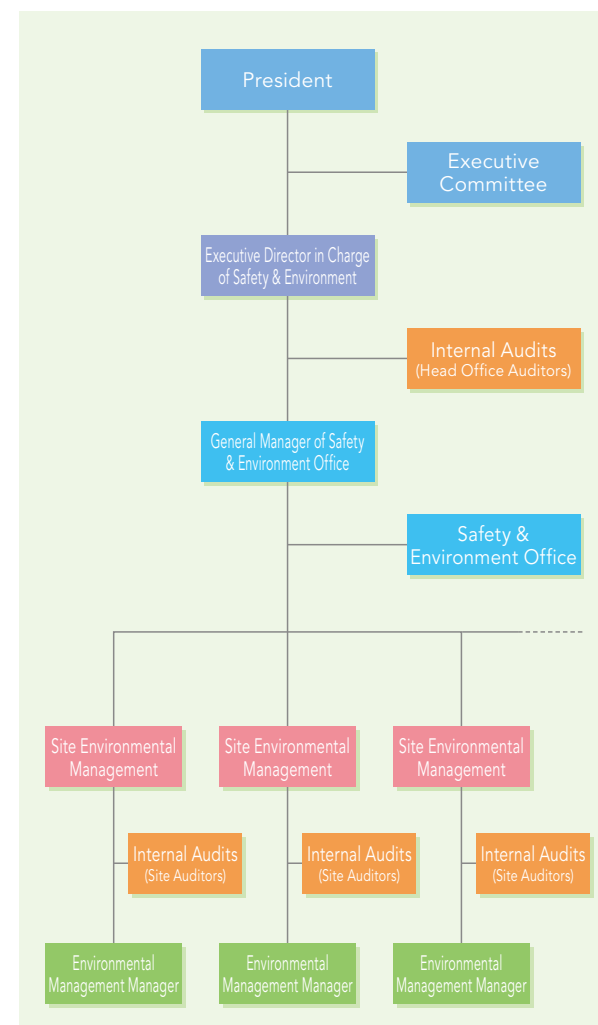
## Environmental Management System

TDK has a company-wide Environmental Management System (EMS) which is headed by the company president.

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

In addition, the various departments of the head office comprehensively deal with product-related environmental issues that were difficult to deal with under a site-driven environmental management system. The overall framework now provides the basis for managing the business processes of purchasing, manufacturing, and selling.

## EMS Organization



## Operation of the TDK Environmental Management System

In fiscal 2006, all domestic manufacturing sites of TDK shifted to the company-wide environmental management system (EMS). This allowed systematic operation of EMS, clarifying the direction of TDK's environmental activities. At overseas sites, we obtained ISO 14001\* certification by fiscal 2008 and are currently in the process of switching to the company-wide EMS, with particular emphasis on our Chinese plants.

Throughout the TDK Group, EMS plays a vital role in working towards the goals defined by the TDK Environmental Action 2015.

With the aim of further streamlining our operations under a set of comprehensive and shared management principles, we are pursuing integration of an Occupational Health & Safety Management System (OHSMS) which will allow flexible and efficient operations control.

\* ISO14001: International standard related to EMS  
 Note: For a list of ISO 14001 certified sites, please refer the web site. [http://www.tdk.co.jp/csr\\_e/csr05200.htm](http://www.tdk.co.jp/csr_e/csr05200.htm)

## EMS Assessment System and Award Program

TDK evaluates environment management operations on a global basis and is constantly aiming to improve the performance and efficiency of actions in this area. This is intended to raise the awareness level with regard to environmental issues. Each year, goals that were defined at the respective sites and their attainment levels are evaluated according to certain criteria.

A system of awards to commend sites with outstanding performance as well as individual contributions has been introduced. The system is not only aimed at rewarding results but also highlights exemplary actions that can serve as a blueprint for the entire company. The award sites for fiscal 2009, along with the main action items are listed below.

| Site                       | Award content (main items)  |
|----------------------------|---|
| Chikumagawa Techno Factory | Significant reduction in CO <sub>2</sub> emissions achieved by switching to alternative fuel. Significant reduction in waste output due to work process improvements.                       |
| SAE Magnetics (H.K.) Ltd.  | Reduced energy consumption due to improved clean room air conditioning efficiency. Over 25% reduction in organic solvent use.   |
| TDK Taiwan Corporation     | Improved energy efficiency of sintering oven and air-conditioned areas results in reduced CO <sub>2</sub> emissions. Significant reduction in waste output due to improved sintering tools. |

## Environmental Risk Management

### Managing Soil Contamination and VOC Risks

TDK has established environmental risk assessment standards and management methods for soil contamination and VOC\*. Each site periodically conducts risk assessment. For high-risk locations, a clearly defined priority sequence of preventive measures, restoration measures etc. ensures effective management of environmental risks.

\*VOC: Volatile Organic Compounds  
 Note: Soil recovery results are available on the web site. [http://www.tdk.co.jp/csr\\_e/csr05300.htm](http://www.tdk.co.jp/csr_e/csr05300.htm)

### Reducing VOC Emissions

TDK has identified the reduction of VOC emissions into the atmosphere as one of its main objectives in the TDK Environmental Action 2015. By the fiscal year 2011, the target is to reduce atmospheric VOC emissions by 30% or more as compared to the fiscal 2001 level. Major measures implemented towards this target include reduction of organic solvents use, as well as installation of solvent recovery systems and solvent incineration systems.

Atmospheric VOC emissions in fiscal 2009 were 33% lower than in fiscal 2001, which means that the medium term target value for 2011 has already been exceeded.

### PCB Storage and Management for Proper Disposal

TDK stores and maintains 90 electric power capacitors and 451 fluorescent light stabilizers, in compliance with the Waste Management and Public Cleansing Law\*. In response to full-fledged PCB waste disposal requirements, we implemented measures to properly dispose of PCBs, and have completed the registration procedure for disposal of PCBs.

\*Japanese law governing the disposal and cleanup of waste

### Regulatory Compliance

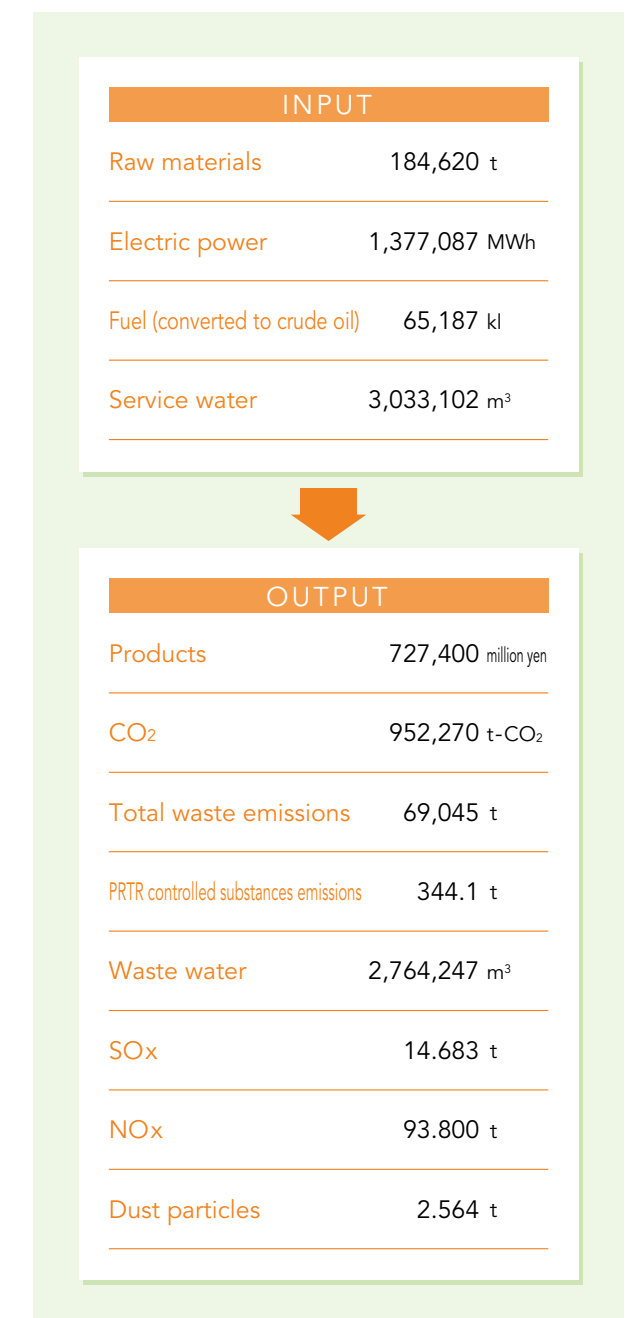
To prevent the contamination of atmosphere, water, soil, etc., TDK strictly complies with all relevant laws and regulations. For certain items, we have even set voluntary standards that are more stringent than the legal requirements, and we take immediate corrective measures whenever necessary. Unfortunately, in fiscal 2009, there were two cases where pollution levels surpassed the legally required standard values. We reported these cases to the authorities and swiftly took countermeasures to prevent any recurrence.

## Outline of Environmental Load

### Assessment of Environmental Load and Defining an Overall Index

TDK is performing a systematic assessment of the environmental load created by our operations on an ongoing basis.

We take the results of these investigations into consideration when defining environment related action items and targets. We are also working on formulating an overall index that converts various environmental loads into CO<sub>2</sub> emissions.



Note: Scope of data  
 PRTR controlled substances, service water, waste water, SOx, NOx, dust particles: Japan  
 Others: Global

# Preventing Global Warming (Manufacturing and Distribution)

Corporate Profile → CSR Activities → Preventing Global Warming (Manufacturing) [http://www.tdk.co.jp/csr\\_e/csr03600.htm](http://www.tdk.co.jp/csr_e/csr03600.htm)  
 Corporate Profile → CSR Activities → Preventing Global Warming (Distribution) [http://www.tdk.co.jp/csr\\_e/csr03700.htm](http://www.tdk.co.jp/csr_e/csr03700.htm)

## Efforts at Manufacturing Sites

Carbon dioxide (CO<sub>2</sub>) released through energy consumption at manufacturing sites makes up the bulk of TDK's total greenhouse gas emissions.

In fiscal 2009, TDK's total CO<sub>2</sub> emissions in Japan amounted to 369,988 t-CO<sub>2</sub>, 5.5% down from the previous year (fiscal 2008), and 5.9% more than the fiscal 1991 level.

CO<sub>2</sub> emissions at overseas sites amounted to 582,262 t-CO<sub>2</sub>, 10.8% up from fiscal 2008.

We actively promote various energy conservation programs to reduce CO<sub>2</sub> emissions.

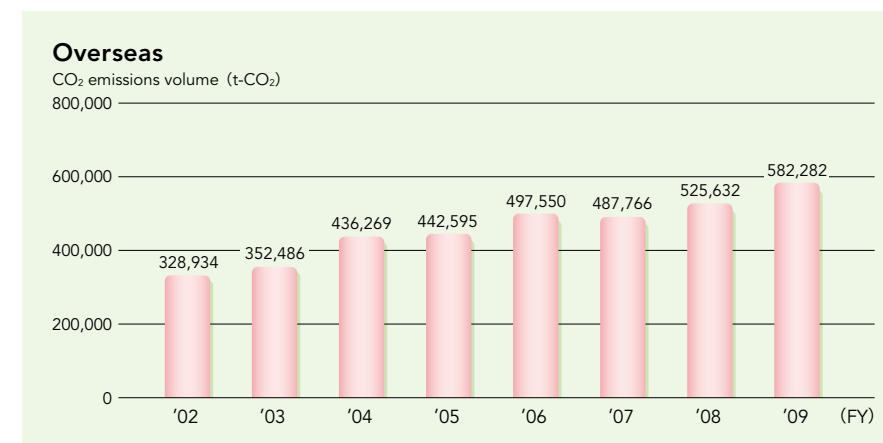
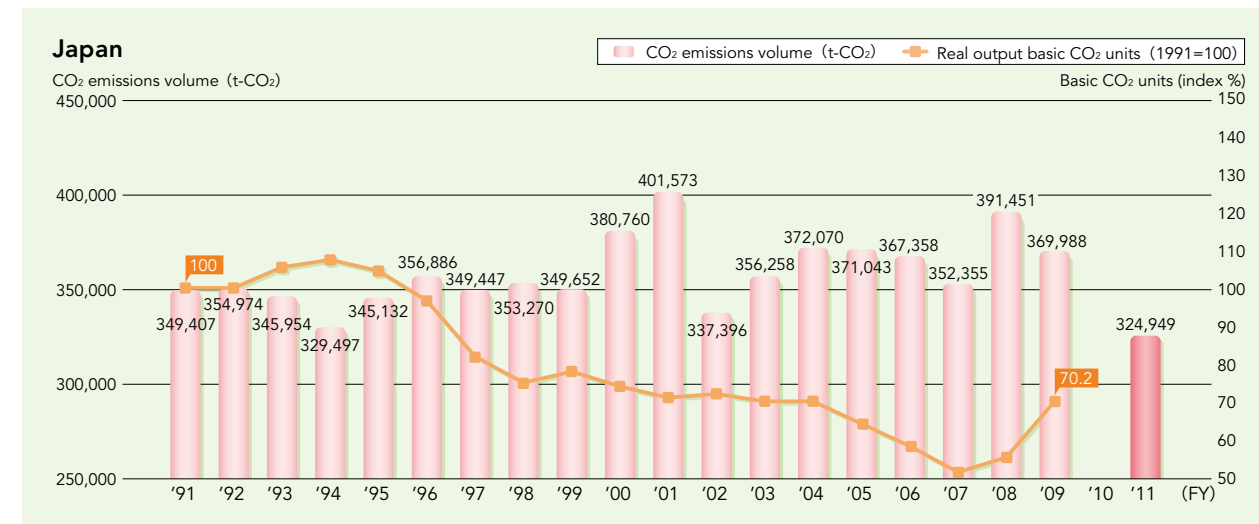
For Type I Designated Energy Management Factories in Japan that consume significant quantities of energy, we have set a stricter target than the non-binding target set down in the Energy Conservation

Law\*, which calls for a minimum 1% annual improvement in energy consumption per unit of products. We have set a target of at least 2.0% per year. Regarding fixed energy consumption, independent of production volume, we have also set a target of 1.0% or more year on year reduction. By achieving these specific targets, we aim to meet our medium term objective of reducing CO<sub>2</sub> emissions by at least 7% from the fiscal 1991 level by March 2011 (corresponding to a reduction of 324,949 t-CO<sub>2</sub> at domestic sites).

In an effort to bolster energy management at overseas manufacturing sites, we established a medium term target for reducing CO<sub>2</sub> emissions on a global basis (emissions in Japan and overseas combined) in the TDK Environmental Action 2015 launched in fiscal 2007. The goal here is to reduce CO<sub>2</sub> emissions by 5% or more by March 2011, as compared to the fiscal 2006 level.

\* Law promoting more efficient use of energy

## TDK CO<sub>2</sub> Emissions Trends



Note1: Real output: nominal output/price index released by BOJ (electric equipment)  
 Note2: TDK's standards for CO<sub>2</sub> emissions conversion are as follows:  
 • 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 CO<sub>2</sub> conversion factor.  
 • The CO<sub>2</sub> conversion factor for fuel is a factor stipulated in the Law Concerning the Promotion of the Measures to Cope with Global Warming.  
 • The CO<sub>2</sub> conversion factor for electricity purchased (in Japan) is the basic unit of equivalent CO<sub>2</sub> emissions published by the Federation of Electric Power Companies of Japan. (For the fiscal 2009 figure, the fiscal 2008 factor is used.)  
 Because the conversion factor was finalized in FY 2008, the figures for CO<sub>2</sub> emissions and real output basic CO<sub>2</sub> units for fiscal 2008 (in Japan) have been revised.  
 • The CO<sub>2</sub> conversion factor for electricity purchased (overseas) is the factor for each country stipulated in the GHG Protocol Initiative. (The fiscal 2007 to 2009 figures use the fiscal 2006 factor.)  
 The figures for CO<sub>2</sub> emissions from fiscal 2002 to 2008 (overseas) have been revised as a result of a change in GHG protocol factor.

## Initiatives to Reduce CO<sub>2</sub> Emissions

### Global Warming Countermeasure Summit

In May 2008, TDK organized its first "Global Warming Countermeasure Summit" as a company event. On this occasion, a number of special interest groups were formed, headed by energy experts from the TDK Group in Japan, on topics such as sintering, air conditioning, and air compression systems. During FY2009, special interest group meetings were held a total of 12 times, discussing measurement data obtained according to a common standard throughout the TDK Group. Topics of discussion included energy efficiency and energy wastage. The participants realized that setting themes and targets for energy conservation, which often was difficult when done on a site-by-site basis, would be easier if a common energy efficiency index could be used as a reference. A standard was therefore established which has made benchmarking and comparisons between sites possible. Targets for improvement can now be identified more readily. The lively exchange of information among the special interest group members also brings new incentives and helps the experts to hone and improve their skills.

In the current economic and geological climate, finding ways to combat global warming and reduce energy use is becoming ever more important, also in order to ensure the continued profitability of a business enterprise. The work of the special interest groups will be further expanded in future and is expected to significantly contribute to our efforts in this regard.



A session at the first Global Warming Countermeasure Summit (May, 2009)

### Participation in "Trial Implementation of an Integrated Domestic Market for Emissions Trading"

In October 2008, the Japanese government started the "Trial Implementation of an Integrated Domestic Market for Emissions Trading." TDK decided to take part in this initiative and actively contribute to it, because we see it as a way to speed up the reduction in CO<sub>2</sub> emissions volume from industrial activities, and because we want to help in evaluating the effectiveness and validity of an emissions trading scheme. We filed our application in December 2008 with the Ministry of Economy, Trade and Industry, and the application was accepted. Taking into account the plans for self-regulatory initiatives in the industry, we plan to participate while setting targets that are in line with the TDK Environmental Action 2015.

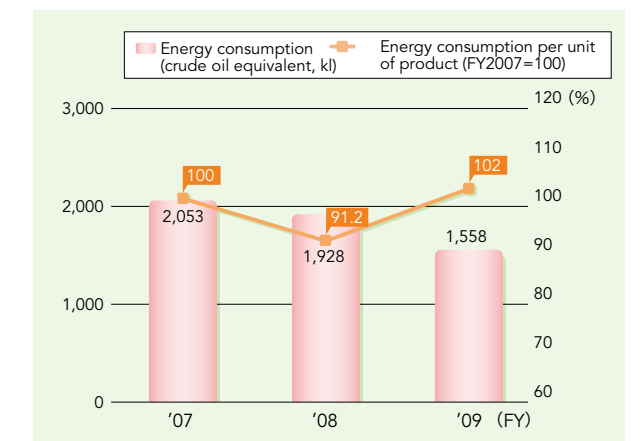
## Distribution Activities

In fiscal 2007, TDK established a committee to promote energy savings and improved operation procedures in distribution. Company-wide efforts to reduce distribution costs and energy consumption are now under way. In fiscal 2009, as in 2008, the following measures were taken to achieve the nonbinding goal set down in the Energy Conservation Law to reduce energy consumption per unit of products by at least 1%:

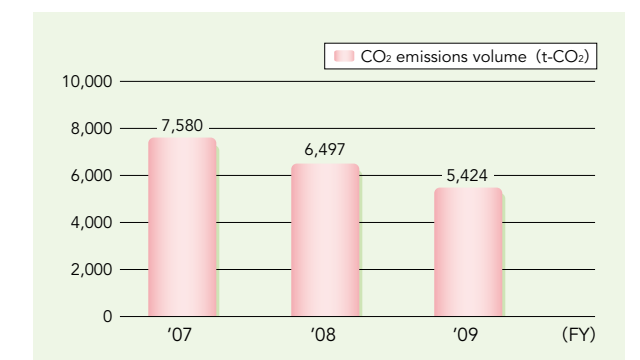
- Implement 100% modal shift as much as possible
- Reduce the number of special transport runs with bad loading ratio
- Use local ports efficiently to reduce the domestic transport distances
- Improve loading ratio by changing from chartered transport to consolidated transport

However, due to a reduction in sales, the energy consumption per unit deteriorated by 11.5% compared to the previous year, so that the target could not be achieved.

### Trends in Energy Usage for Distribution and Consumption Per Unit of Product (TDK Corporation)



### Trends in CO<sub>2</sub> Emissions for Distribution (Japan)





# Managing Waste

Corporate Profile → CSR Activities → Managing Waste [http://www.tdk.co.jp/csr\\_e/csr03800.htm](http://www.tdk.co.jp/csr_e/csr03800.htm)

## Global Efforts to Reduce Waste Generation

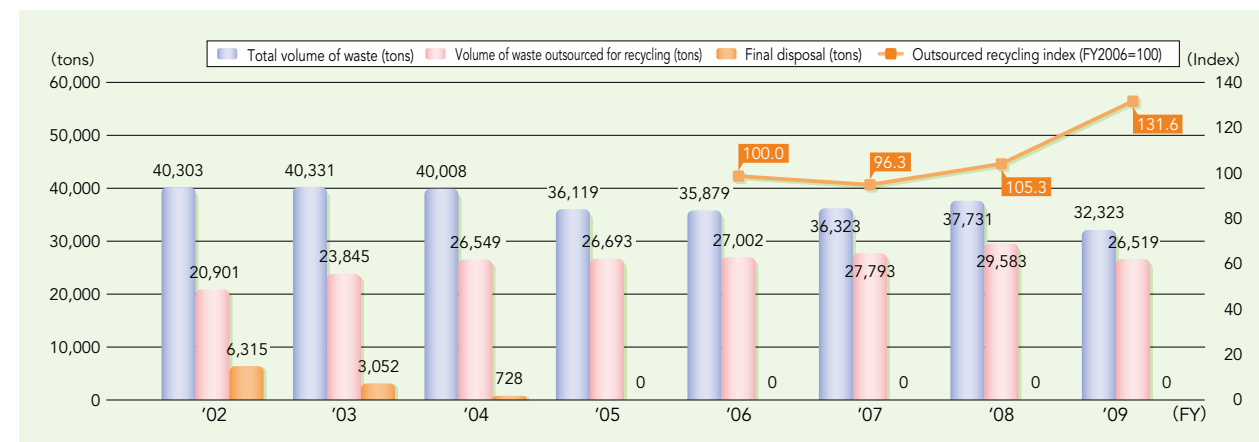
TDK achieved zero emissions in all its sites in Japan and overseas in fiscal 2007. From the viewpoint of effective utilization of resources, we have also endeavored to reduce the amount of externally processed and recycled waste.

We intend to refocus on our starting point of 3R (Reduce, Reuse and Recycle) and work towards a further reduction in the amount of generated waste.

## Efforts at Sites in Japan

TDK sites in Japan strived to achieve the fiscal 2009 target of reducing the outsourced recycling index by 1.0% or more from the fiscal 2008 level. The volume of waste outsourced for recycling decreased by 3,064 tons compared to 2008, resulting in a figure of 26,519 tons. However, due to a significant reduction in turnover, the outsourced recycling index increased by 25.0% compared to fiscal 2008, therefore failing to achieve the target.

### Trends in Waste Emissions (Japan)

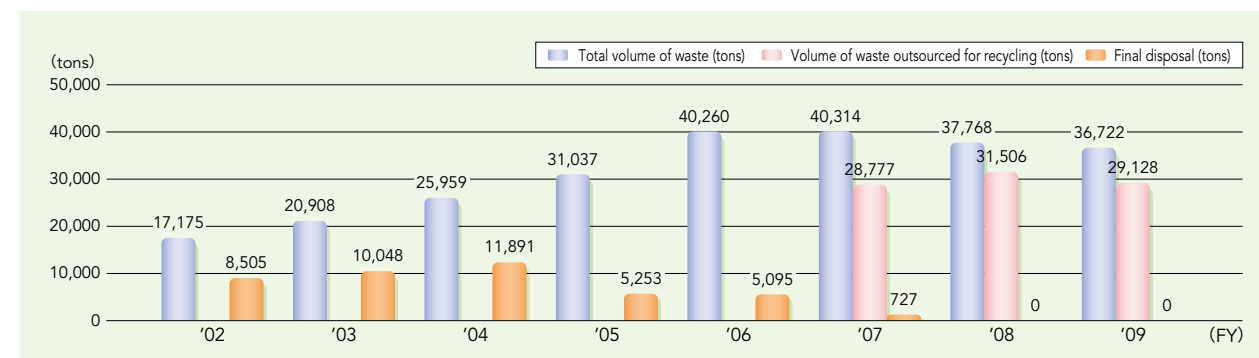


## Efforts at Overseas Sites

Outside Japan, the aim for FY2009 was to maintain the zero emissions level reached in FY2008 and to further

minimize waste generation. These efforts were successful, and total emissions were reduced from the fiscal 2008 level by 1,046 tons to 36,722 tons. The volume of waste outsourced for recycling decreased from fiscal 2008 by 2,378 tons to 29,128 tons.

### Trends in Waste Emissions (Overseas)



# Promoting the Creation of Environment-Conscious Products

Corporate Profile → CSR Activities → Promoting the Creation of Environment-Conscious Products [http://www.tdk.co.jp/csr\\_e/csr03900.htm](http://www.tdk.co.jp/csr_e/csr03900.htm)

## Environment Protection Is Linked to Product Quality

TDK defines the term "product environmental consideration" as referring to products that are designed in an environment-conscious manner (or to environment-conscious design specifications). This involves preventive management of products so that they do not cause pollution. We believe that protecting the environment ensures sustainability for the company and is directly linked to product quality.

Our activities will be focused on the following four aspects:

1. Climate change
2. Environment and health
3. Sustainable use of natural resources and sustainable management of waste
4. Nature and Biodiversity

Our environmental strategy with regard to products will also be oriented along these lines.

In concrete terms, product environmental consideration can be classified into the following three categories:

- (1) Free of regulated chemical substances
- (2) Effective use of resources (resource recycling/resource saving)
- (3) Energy-saving design (lower energy consumption in the production process/lower power consumption, etc.)

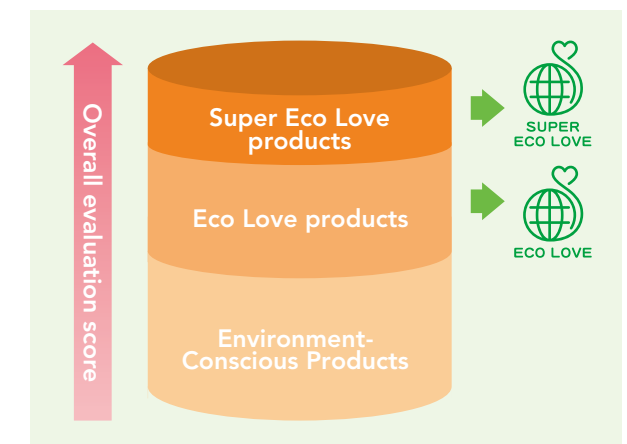
At TDK, we regard it as a given that our products will not contain any banned substances, and we place a chief focus on energy-saving design. This covers all aspects of producing, storing, converting, and applying energy.

## Consistently Creating Environment-Conscious Products

In 1998, TDK introduced a product assessment system that takes the environmental impact of a product over its entire life cycle into account, from the design and development stage right through to the final stage. Even minute amounts of chemical substances in all parts that make up a product are recorded. The energy expended during manufacturing, the energy consumption reducing effect of the product, both on its own and when used in another end product are carefully assessed, and only such products that pass strict evaluation criteria and are approved by the General Manager of the Quality Assurance Department can proceed to the manufacturing and marketing stage.

In September 2008, we implemented another important framework aimed at ensuring the consistent creation of environment-conscious products by defining the "Eco Love" and "Super Eco Love" certification categories.

### Outline of Environment-Conscious Product Certification Framework



Out of the products approved in the product assessment process, this certification framework selects such products that effectively reduce the environmental burden and take the lead in the industry (Eco Love). Among Eco Love items, those which realize environment-friendliness on an even higher level are certified as "Super Eco Love." Products from both of these categories are introduced on our web site.

Products may lose their certification if they no longer conform to the most up-to-date requirements. This is aimed at constantly providing incentives for further development and improvement.

Currently, the main focus is on climate change (preventing global warming). TDK products whose manufacture, distribution, and usage in other end products contributes to saving energy or to the utilization of alternative energy sources will receive the Eco Love or Super Eco Love certification.

### Quantifying Environmental Loads and Designing for the Environment from the Outset

TDK assesses the environmental impact of a product over its entire life cycle. For this purpose, measurable physical quantities are defined for the purpose of

quantification (input and output analysis). This is done in compliance with the LCA principles that demand the calculation of environmental load values referenced to standard levels, as well as the requirements of the EuP Directive for ecological profiling. By tackling all environmental aspects, we are able to design and develop products whose overall impact on the environment has been minimized as far as possible.

In coordination with the rest of the industry, we are currently developing optimized LCA methods for input and output analysis (first stage) and inventory analysis\* for background data assessment (second stage).

When the LCA concept has fully matured and become accepted in the marketplace, and when an infrastructure for evaluation of all products is in place, we intend to integrate it as an element of environment-conscious design in our product environmental management framework. We comply with customer requests based on product assessment data gained through this process.

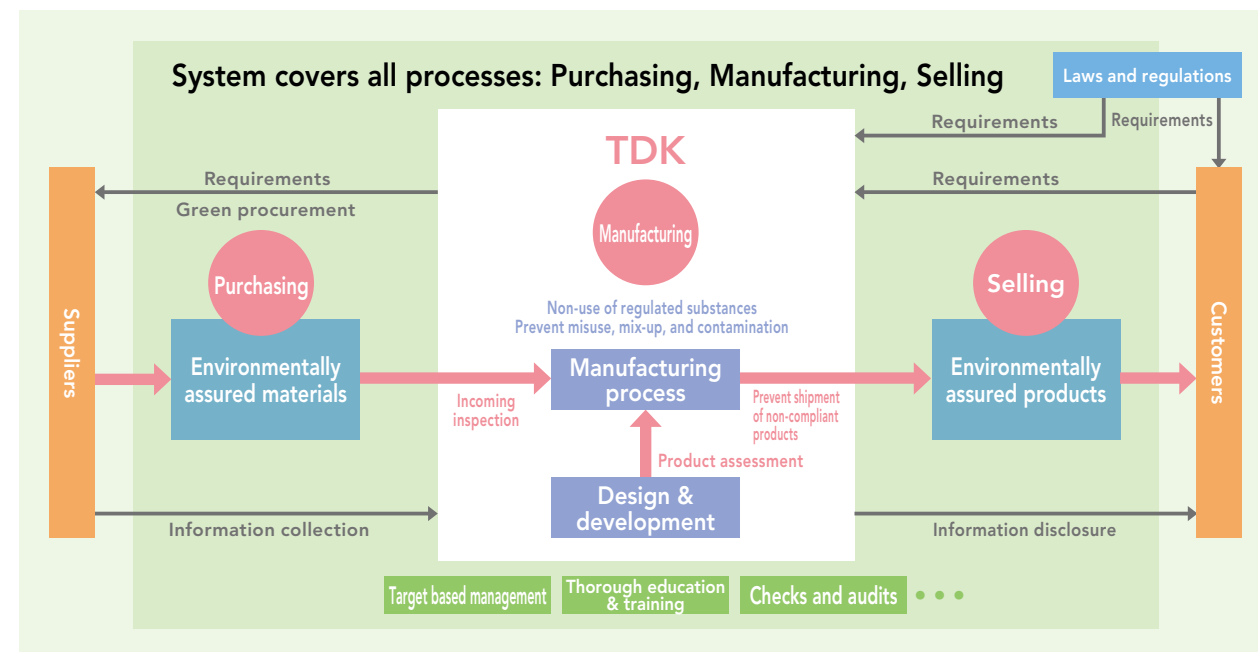
\* Inventory analysis: Detailed analysis of energy and materials input and output in all processes over the life cycle of a product

### Preventing Product Related Exposure to Chemical Substances Through Proper Management

In 2004, TDK introduced the "product environmental management" framework to effectively prevent the possibility of product related exposure to chemical substances harmful to human health and the environment. Currently, this has been integrated into our Quality Management System (QMS).

As a component manufacturer positioned within the supply chain, we are concerned with proper prevention and management at the Purchasing, Manufacturing, and Selling stages.

### Product Environmental Management System



### Compliance with REACH Regulation

Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) is a binding EU regulation for manufacturers which came into force in June 2007.

The regulation comprises the following requirements for chemical substances, preparations, and molded products:

1. Registration (chemical substances, preparations, molded products)
2. Notification (molded products)
3. Compulsory application for permission (chemical substances, preparations)
4. Usage limitations (chemical substances, preparations, molded products)

5. Communication of information (chemical substances, preparations, molded products)

As a components manufacturer, TDK considers the communication of information our most important duty. Based on the assumption that all products may be used in the EU region, we communicate information on SVHC\* disclosure requirements to our upstream suppliers and partners, in line with our Green Procurement Standard.

We also have established procedures to convey appropriate information to our customers and partners downstream in the supply chain, as required by the REACH regulation.

In fiscal 2009, we have performed information disclosure for 15 substances of very high concern with

regard to EU market products. We are committed to continue product environment related information disclosure also in future.

\* SVHC: Originally an acronym for "Substances of Very High Concern," now specifically used to refer to substances covered by the requirements of the REACH regulation.

### Fiscal 2009 Excellent Environment-Conscious Products

#### Excellent Environment-Conscious Product (1) High-Performance Neodymium Magnet NEOREC 53 Series



Metal magnet featuring drastically improved magnetic force characteristics (residual flux density, Br), thanks to a unique low-oxygen process. Enables further miniaturization of sets and products.

Major environmental load reducing effects:

- Does not use any rare terbium (Tb) raw material, but still achieves performance on a par with regular products.
- Improved residual flux density (Br) allows motors to be made more compact, using fewer resources.
- Improved residual flux density (Br) contributes to lower energy consumption by set products.
- Improved manufacturing techniques using fewer resources and less energy.

#### Excellent Environment-Conscious Product (2) DC-DC Converter for Automotive Use



This air-cooled DC-DC converter was developed specifically for use in next-generation hybrid electric vehicles (HEV) with high fuel economy. It features high efficiency, compact dimensions, and light weight. As a DC-DC converter, it provides industry's highest level performance.\*

Major environmental load reducing effects:

- Compact dimensions and light weight help to conserve resources (5% less volume and 45% less weight, compared to previous TDK product).
- Conversion efficiency improved by 1%, to contribute to fuel savings.

\* As of April 1, 2009, according to TDK investigations

#### Excellent Environment-Conscious Product (3) EV/HEV Battery Current Sensor



This high-precision current sensor is designed for use in monitoring the charge/discharge current of high-voltage batteries used in electric and hybrid electric vehicles. It features excellent linearity and temperature characteristics and can measure large currents up to ±200 amperes. Thanks to special design technology, power consumption when driven has been reduced by 64%.

Major environmental load reducing effects:

- High-precision current input/output monitoring helps in configuring a highly efficient battery system.
- Support for +5V single power supply drive results in 64% lower power consumption by sensor (compared to previous TDK product).



# TDK CSR REPORT 2009

English version

