

Corporate Social Responsibility Report 2011



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Corporate Outline

Company name	NGK INSULATORS, LTD.
Address	2-56, Suda-cho, Mizuho, Nagoya 467-8530, Japan
Telephone	+ (81) 52-872-7171
Establishment	May 5, 1919
Paid-in Capital	69.8 billion yen (As of March 31, 2011)
Employees	NGK: 3,293 Consolidated: 11,666 (As of March 31, 2011)
Business	Manufacture and sale of insulators, electric power equipment, industrial ceramic products, electronic components, special metals products, and plant engineering

Editorial Policy

In drafting this "Corporate Social Responsibility Report 2011," reference was made to the Ministry of the Environment's Environmental Reporting Guidelines (2007) and the Global Reporting Initiative's 2006 Sustainability Reporting Guidelines.

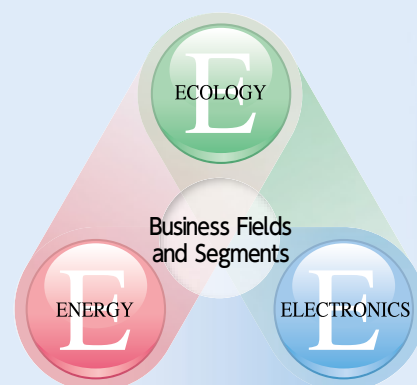
The report covers the period from April 1, 2010 to March 31, 2011. Reporting for overseas Group companies covers the period from January 1, 2010 to December 31, 2010. The range of companies involved differs with each initiative cited, but is clearly stated with the data.

- Next year's version of this report is scheduled to be published in July 2012.
- This report can be viewed online.

Web <http://www.ngk.co.jp/english/csr/>

Business Fields and Segments

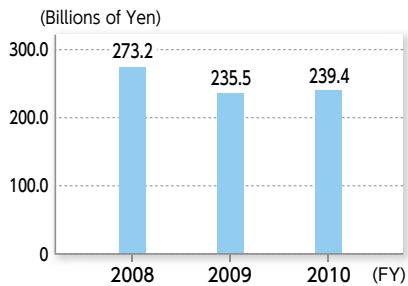
The NGK Group leverages its core ceramics technology in the fields of Ecology, Energy, and Electronics (the "Triple-E" Fields) to develop its Power, Ceramic Products and Electronics businesses. Our aim is to protect the environment and benefit society.



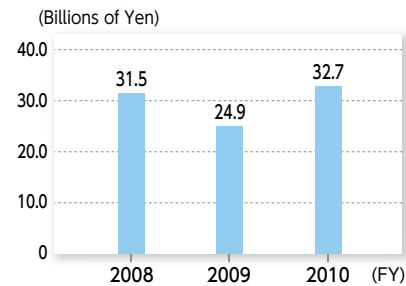
Business Overview

Business is growing on a global scale and changes are taking place with increasing speed. With proprietary ceramics technologies as its core technologies, the NGK Group is globally and dynamically developing its own business operations.

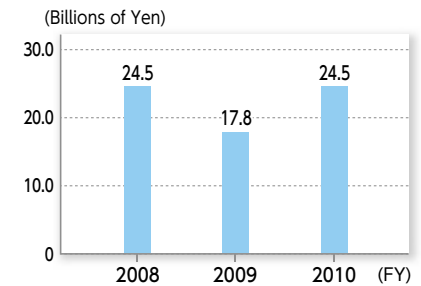
Net Sales (Consolidated)



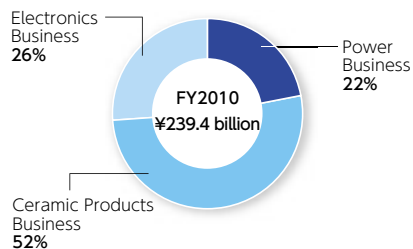
Ordinary Income (Consolidated)



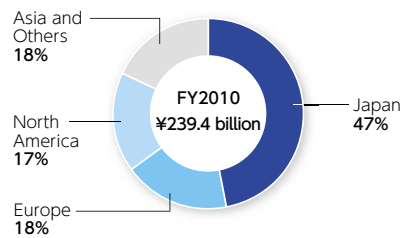
Net Income (Consolidated)



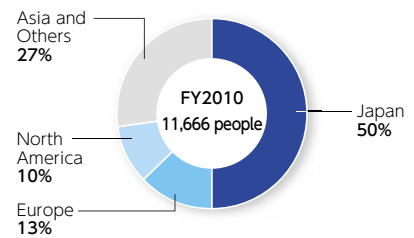
Sales by Business Segment



Sales by Region (Consolidated)



Workforce by Region (Consolidated)



Business Development by Region

Europe

7 Consolidated Subsidiaries

Asia and Others

13 Consolidated Subsidiaries

Japan

NGK Insulators, Ltd.
22 Consolidated Subsidiaries
2 Equity-method Affiliates

North America

13 Consolidated Subsidiaries

Business Groups and Main Products

Power Business

- Insulators for power lines and transformers
- NAS batteries for power storage
- Devices for power transmission



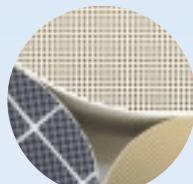
NAS batteries for power storage



Insulators for power lines

Ceramic Products Business

- Ceramic products to purify automotive exhaust
- Industrial-use ceramics
- Combustion apparatuses and refractories
- Plant engineering



Ceramic products to purify automotive exhaust



Home-use "C1" water purifier

Electronics Business

- Beryllium copper rolled and processed products
- Metal molds
- Ceramics for semiconductor manufacturing equipment
- Ceramics for the electronics industry



Beryllium copper products



Ceramic components for inkjet printers

Striving for Sustainable Growth

~Establish a firm management base and promote CSR in which all employees can take part~

Our prayers go out to the many people whose lives were lost in the Great East Japan Earthquake, as do our deepest sympathies to those still living today in the region hardest hit by this tragic disaster.

The minor damage sustained to NGK facilities and equipment in the earthquake did not hamper production work, and we are fortunate to report that there were no casualties among our personnel. The day after the disaster struck, we began sending material for restoration work to the devastated region, and dedicated ourselves fully to the task of inspecting customer equipment and facilities and restoring them to working order.

Going forward, we intend to continue offering the greatest assistance and responsiveness that NGK can muster to speed the recovery and revitalization of the affected region.

It was under these circumstances that I was appointed the 11th president of NGK on April 1, 2011.

In spite of the modest economic recovery currently under way in Japan, uncertainty is expected to linger due to the convergence of a strong yen, escalating prices for raw materials, and the March 2011 disaster. With that said, I have determined that our most vital management issue is to raise corporate value. Two actions will enable this. The first is to enhance our competitiveness even further by promoting steps to innovate our manufacturing structure. The other is to realize sustained growth, largely through the timely creation of new products and technologies that will become NGK's next core growth drivers. Success here will be critical to decisively winning out against stiff global competition from companies from emerging markets, and is also essential to our global business expansion.

Moreover, in an effort to strengthen our corporate structure and push steadily ahead with creating an even more open corporate culture, I have traveled to NGK business sites to encourage employees to keep five points in mind as they work. Those are to seek innovation in our technologies, emphasize speed, pay attention to on-site operations, encourage human resource development, and promote CSR in which all employees can take part.

I believe that the pursuit of innovation in our technologies, which draws our technologies, manufacturing, and products together, is essential to forming the management base needed to outlast the intense competition we anticipate, and to realize sustainable growth. By thoroughly utilizing and ratcheting up NGK's

array of distinctive technologies in the field of ceramics, we can ensure that our technologies remain on the cutting edge and raise NGK's level of competitiveness.

Furthermore, my view is that "on-site operations" encompass every site where our employees work, not just those involved in manufacturing. I intend to proactively head out to our sites to speak directly with those on the ground, then move swiftly to make decisions based on the range of well-balanced information I gather.

There is one more management base component that will back NGK's sustainable growth—our human resources. Honing the knowledge, technical expertise and skills of each NGK employee and raising their level of competency even higher is the key to supporting our future competitiveness and achieving growth.

I intend to groom human resources who can assertively take on challenges by delegating the authority and accountability necessary to allow our young people to push ahead boldly in their work with ambition and confidence. In parallel, supervisors at each NGK business site will properly follow up on and guide the junior colleagues in their charge. These steps will allow NGK to develop a pool of enthusiastic and dynamic human resources with the power to propel our sustainable growth. I am convinced that having our managers, especially those at the general manager level, take the personal initiative to reform their mindset in this way is important to making this vision a reality.

CSR is a basic assumption for a company's continued existence and growth, and is the starting point for management. When employees act in line with the highest ethical standards and show self-discipline that respects social values and norms, they elevate a company's capacity to tackle risk and firmly meet society's vested trust in it.

To this end, in July 2011, we completely revised the NGK Group Guidelines for Corporate Behavior to serve as a guidepost for efforts to realize NGK's corporate philosophy and promote CSR. Overall, we worked to make everything more intuitive. In addition to condensing the items included, we defined a set of new behavioral guidelines that specifically spell out the kind of behavior expected of every employee. All told, we expect these changes to take the penetration of CSR within the Group a step beyond where it stands today.

As a company, NGK learned several important lessons from the recent disaster in Japan. In past years, NGK had formulated a business continuity plan (BCP) to enact in the event of a major earthquake in the Tokai region, along the Pacific coastline in the vicinity of Nagoya. Concrete disaster-readiness efforts have included the establishment of a new production site for ceramic honeycomb substrates in the city of Nomi in Ishikawa Prefecture, far removed from Nagoya.

However, upon witnessing the damage suffered by suppliers and business partners in the earthquake, as well as the completely unanticipated devastation caused by the tsunami, we are coming to realize that the scenarios we envisioned and planned for to date are almost certainly inadequate to cope with a disaster of similar magnitude.

NGK manufactures products that are closely tied to basic infrastructure and global environmental preservation. Ensuring the ability to consistently supply these products over the long term is a social responsibility that NGK simply cannot ignore. Accordingly, we began reexamining our BCP in the wake of the March 2011 disaster, and are taking the necessary steps now to improve it.

Since 2009, NGK business sites and Group companies have played host to "CSR Talk Live" sessions, where members of top management hold direct dialogue with employees. These gatherings are typically about an hour long, but I believe they have done much to shrink the distance between management and on-site operations, promote a sense of group oneness, and foster a greater sense of trust in NGK among employees.

This initiative is one that will remain in place for the foreseeable future. But rather than limit it in-house, I want to see us extend this exchange of opinions to include people from the communities that are home to our sites, as well as suppliers, business partners and other stakeholders. In addition to encouraging a better understanding of NGK's various initiatives, I hope to hear firsthand the frank views of what they think of NGK and our CSR initiative.

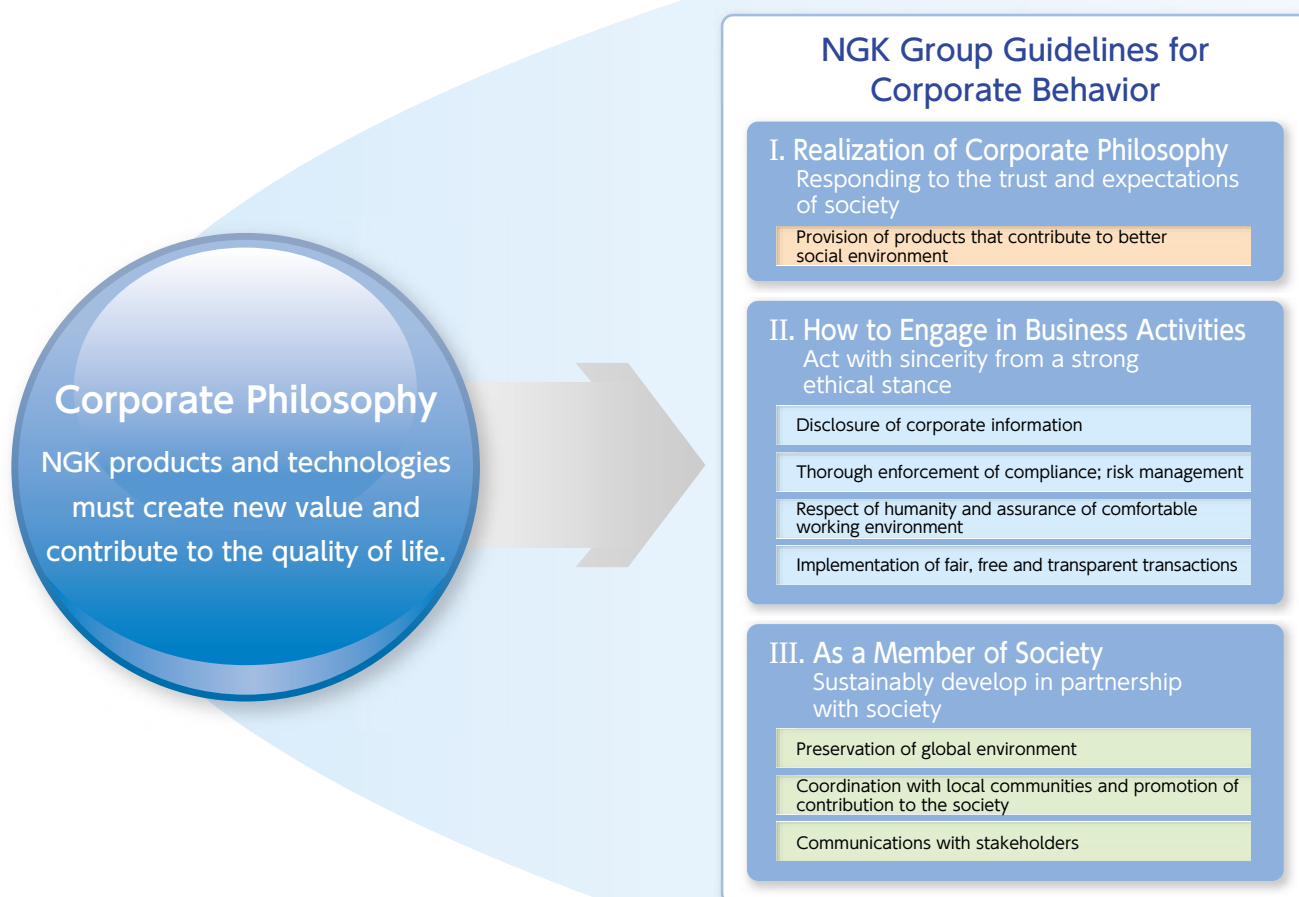
Similarly, I ask those of you reading this CSR Report today to feel free to offer your direct and honest opinion of NGK's initiative.



Taro Kato

Taro Kato
President

Through CSR Initiatives, NGK is Contributing to Sustainable Social Development.



CSR from NGK's Perspective

NGK leverages proprietary technology to deliver products worldwide that are essential to social infrastructure and that contribute to environmental conservation. To contribute to society in a manner that embodies our corporate philosophy, we are committed to offering products and services that help create a better social environment and bring new value to society. In doing so, we are working together with our customers, employees and business partners to fulfill our social responsibility as a company in every respect, an act essential to meeting the public's expectations and earning its trust.

To ensure that this approach is shared throughout the Group, NGK has formulated the NGK Group Guidelines for Corporate Behavior. The Group also strives to create a company capable of garnering greater levels of trust from stakeholders through its daily corporate activities. With publication of our CSR Report in 2009, we drafted eight actions for promoting CSR that will serve as the basis for reviewing our CSR activities each year. Through these actions, the NGK Group seeks to contribute to society's sustainable development.

Specific Items and Details of Actions in Promoting CSR

Provision of products that contribute to better social environment	<ul style="list-style-type: none"> Development and provision of products and services that help to preserve the natural environment Development and provision of products and services that embody safety and reliability Realization of higher quality products and services
Disclosure of corporate information	<ul style="list-style-type: none"> Enhancement of corporate information disclosure Consistent improvement of internal controls relating to financial reporting
Thorough enforcement of compliance; risk management	<ul style="list-style-type: none"> Thorough promulgation of the NGK Group Guidelines for Corporate Behavior through education Reinforcement of the risk management system Respect and protection of intellectual property rights Creation and consistent improvement of a framework for information security Strict adherence to the Anti-Monopoly Act, Subcontract Act, and other laws and regulations pertaining to business transactions Strict adherence to laws and regulations relating to export management
Respect of humanity and assurance of comfortable working environment	<ul style="list-style-type: none"> Maintenance and consistent improvement of safe and comfortable working environments Development of human capital and recruiting of human resources across the Group Utilization of diverse human resources Support for better balance between work and home life/childrearing
Implementation of fair, free and transparent transactions	<ul style="list-style-type: none"> Fair and honest evaluation of procurement partners, and extensive resource diversification Promotion of CSR procurement
Preservation of global environment	<ul style="list-style-type: none"> Prevention of global warming Adoption of environmentally friendly production processes Promotion of resource recycling Strengthening of global environmental management
Coordination with local communities and promotion of contribution to the society	<ul style="list-style-type: none"> Provision of scholarships and living assistance to foreign students Cooperation with local communities, labor unions, and NPOs in social contribution activities Support for volunteer activities by employees
Communications with stakeholders	<ul style="list-style-type: none"> Communication with customers and procurement partners Interaction with local communities via plant tours and open house events CSR Talk Live (Discussions on implementing CSR with every employee class)

CSR Promotion Framework

NGK has established the CSR Committee, the NGK Environmental Protection Committee, the Company-wide Quality Committee, the Company-wide Safety and Health Committee, and the Internal Controls Committee to promote Group CSR activities.

As of April 2011



Actions for Promoting CSR	CSR Objectives	FY2010 Targets	
Provision of products that contribute to better social environment	Develop and provide products and services that help to preserve the natural environment	<ul style="list-style-type: none"> Continue to deliver large-scale NAS battery systems to Abu Dhabi Expand sales of NAS batteries for installation in conjunction with wind and solar power generation equipment, particularly outside of Japan 	
	Develop and provide products and services that embody safety and reliability	<ul style="list-style-type: none"> Expand delivery of transmission and transformer insulators to accommodate full-scale implementation of planned ultrahigh-voltage transmission network infrastructure in China Expand delivery of water purifying systems to the pharmaceutical sector, which demands consistently higher levels of safety and quality 	
	Realize higher quality products and services	<ul style="list-style-type: none"> Promote enhancement of quality activities and functions Company-wide, and develop mechanisms for minimizing quality risks in the market 	
Disclosure of corporate information	Enhance disclosure of corporate information	<ul style="list-style-type: none"> Continue to provide fair and honest information disclosure in a timely and appropriate manner 	
	Consistently improve internal controls over financial reporting	<ul style="list-style-type: none"> Enhance management level in each division from the self-evaluation stage to reduce number of issues identified by audits as requiring improvement 	
Thorough enforcement of compliance; risk management	Thoroughly promulgate the NGK Group Guidelines for Corporate Behavior through education	<ul style="list-style-type: none"> Enact position-based training, repeatedly encourage extensive promotion of CSR Talk Live; form liaison committees with Group companies and other areas, and continue to periodically verify awareness levels 	
	Reinforce the risk management system	<ul style="list-style-type: none"> Continue to have the CSR Committee periodically confirm and follow-up on the status of Company-wide risk countermeasures based on the second questionnaire conducted in FY2009 Conduct second CSA questionnaire at domestic Group companies in December 	
	Respect and protect intellectual property rights	<ul style="list-style-type: none"> Transition to a training system that emphasizes effective intellectual property training and dialogue, and ensure full range of content Ensure robust intellectual property training for managers 	
	Create and consistently improve a framework for information security	<ul style="list-style-type: none"> Establish new NGK Group IT Security Standards and apply to all Group companies, including those outside Japan 	
	Strictly adhere to the Anti-Monopoly Act, the Anti-Trust Act and other laws and regulations pertaining to business transactions	<ul style="list-style-type: none"> Provide individualized support to domestic Group companies for strict adherence with the country's Subcontract Act 	
	Strictly adhere to laws and regulations relating to export management	<ul style="list-style-type: none"> Explore options for linking the export control and shipping systems to enhance assurance regarding export control audits 	
Respect of humanity and assurance of comfortable working environment	Maintain and consistently improve safe and comfortable working environments	<ul style="list-style-type: none"> We will continue to institute experiential safety education for new hires. Employees hired in FY2007 will also be targeted for training as we work to share awareness of the importance of occupational safety. "Identify and Rectify" activities, which fell short of anticipated levels in FY2009, will be extensively reemphasized via voluntary activities at each worksite. We will conduct worksite patrols at manufacturing- and technology-related sites in a drive to raise awareness of organizational safety and the work environment in order to prevent fires. Enactment status will be compiled each quarter, with follow-ups conducted by the Safety and Sanitation Committees of each business site and Company-wide in order to enhance awareness of occupational safety. 	
	Develop human capital and recruit human resources across the Group	<ul style="list-style-type: none"> The program to strengthen on-site capabilities, the core element of manufacturing training at NGK, was completed in FY2009. Accordingly, we will establish a course to cultivate in-house instructors that will enable those new to any organization within the Group to take action under their own initiative to receive the same training as on-site managers in this area. The number of people eligible for practical overseas internships will be extended from four in FY2009 to around ten, creating a pool of human resources capable of adapting smoothly to assignments outside Japan. Ahead of base establishment in Mexico, we plan to reoffer Spanish language courses and raise the number of employees eligible to take part in training prior to assignment to Mexico. To foster candidates for general manager and division director in the near future, we will implement a new seminar to train the Group's next generation of leaders. The seminar will focus on cultivating the ability to think and judge, and business skills, with 11 people to take part in the first session. 	
	Utilize diverse human resources	<ul style="list-style-type: none"> To maintain and increase the percentage of employees with disabilities, we will expand the number of clerical and technology-related jobs open to these employees and diversify our recruitment methods. We will review our system for transferring from jobs in the general employment pool to career-track positions to allow motivated employees to expand their employment options. 	
	Support a better balance between work and home life/childrearing	<ul style="list-style-type: none"> As the final year of our plan for shortening overall working hours, we will enact the following measures: 1) Increase the number of vacation days by averaging out working time to 8 hours a day 2) Prohibit more than 80 hours of work beyond working hours per month 3) Limit to six months of the year or less work beyond working hours of more than 45 hours a month. To help knowledge of our system of work-life balance support gain traction, details of the system will be published in an accessible format on a special site developed on the Company intranet. We will also create a consultation helpdesk to respond to individual inquiries in an effort to entrench this system. 	

* Evaluation standards for achievement level:

○ Target achieved △ 80% or more of target achieved × Less than 80% of target achieved

FY2010 Achievements	Achievement Level*	FY2011 Targets
<ul style="list-style-type: none"> Delivery of NAS battery systems for major projects outside of Japan was postponed due to project delays. Delivered NAS battery systems (4,000 kW) to a smart grid demonstration project in Miyako-jima, Okinawa, which got under way in October 2010. 	<p>×</p> <p>△</p>	<ul style="list-style-type: none"> Bolster global production system, including the start of production at plants in Ishikawa (Japan) and in Mexico, in order to continue to stably supply products in response to tighter exhaust gas restrictions for automobiles and other sectors. Expand sales of NOx sensors for engine exhaust gas.
<ul style="list-style-type: none"> Began delivering bushings and other insulator products for China's planned ultra-high voltage transmission network infrastructure. Delivered a comparable number of water purifying systems to the pharmaceutical sector as in fiscal 2009, for a steady increase in the cumulative number of systems delivered. 	<p>△</p> <p>○</p>	<ul style="list-style-type: none"> Expand sales of NAS battery systems as part of electricity supply measures.
<ul style="list-style-type: none"> Established the Company-wide Quality Council under the Company-wide Quality Committee to fully examine major quality issues. Formulated "Company-wide Quality Rules" designed to bolster NGK Group quality activities—(1) Confirm quality, (2) Strengthen design review functions, (3) Monitor product quality, and (4) Devise steps for handling market complaints. 	<p>△</p>	<ul style="list-style-type: none"> Embed mechanisms to enhance Company-wide quality activities and functions, and extend these to Group companies. As part of Company-wide quality targets, define and focus efforts to eliminate quality defects through a more extensive design review process. Strengthen design review particularly when altering designs or processes.
<ul style="list-style-type: none"> In addition to timely and accurate disclosure of financial results and other IR data, held financial results presentations and individual meetings with institutional investors, and published business reports and annual reports, among other actions. Used the corporate website to inform the public of incidents involving NGK products, providing information on efforts to determine the cause of an accidental fire involving NAS batteries and subsequent safety measures. Conducted a review and complete update of content on the corporate website to promote a more intuitive understanding of the NGK Group (February 2011). 	<p>○</p>	<ul style="list-style-type: none"> Continue to provide fair and honest information disclosure in a timely and appropriate manner.
<ul style="list-style-type: none"> Confirmed the effectiveness of internal controls governing financial reporting in fiscal 2010 among NGK and its 33 Group companies. Issues that were not discovered at the self-evaluation stage, but were identified by internal audits and other checks, covered 77 items across 41 categories, representing a slight decrease from 50 items in 48 categories in the previous year. 	<p>○</p>	<ul style="list-style-type: none"> Work to enhance the management level in each division and to reduce the number of issues identified by audits. Raise efficiency in assessment and audit of processes that were rated favorably in the previous fiscal year.
<ul style="list-style-type: none"> Distributed leaflets to all employees in April to thoroughly promulgate the NGK Group Guidelines for Corporate Behavior and conducted related training for new hires. NGK divisions and Group companies were instructed by the CSR Committee chair to comprehensively promote awareness of the guidelines. The CSR Promotion Office conducted various training regarding the Guidelines for Corporate Behavior, including as part of position-based training (six sessions, 260 people) and CSR Talk Live (11 sessions, 479 people). An appeal to comprehensively raise awareness of the guidelines was also made at liaison meetings between domestic Group companies. 	<p>○</p>	<ul style="list-style-type: none"> Amend the Guidelines for Corporate Behavior to more intuitively clarify relationships to CSR (July 2011). Define a set of new behavioral guidelines that specifically spell out the kind of behavior expected of every employee in order to better familiarize employees with the Guidelines for Corporate Behavior.
<ul style="list-style-type: none"> Divisions proposed measures for and dealt with risks arising in the course of day-to-day business operations identified by the second CSA questionnaire. Implemented the second CSA questionnaire among executives and managers at Domestic Group companies, with results returned as feedback to each company and business group. 	<p>○</p>	<ul style="list-style-type: none"> Continue to have the CSR Committee periodically confirm and follow up on the status of Company-wide risk countermeasures enacted based on the second questionnaire conducted in FY2010. Conduct third CSA questionnaire targeting NGK in December.
<ul style="list-style-type: none"> Incorporated an e-learning component into intellectual property (IP) training and held small-group seminars (39 seminars, 413 people). Updated the content of training for newly appointed managers with an emphasis on consistency between business, R&D and IP strategies. 	<p>○</p>	<ul style="list-style-type: none"> Take steps to improve and embed e-learning, and enhance dialogue-style training. Enhance awareness-raising programs for managers.
<ul style="list-style-type: none"> Formulated the "NGK Group IT Security Standards" as a common set of rules and guidelines for the NGK Group, and completed adoption of the standards by Group companies worldwide. Established a mechanism for maintaining and improving IT security. Self-examinations were carried out by all Group companies, with results reported to and evaluated by a subcommittee specializing in security under the CSR Committee. 	<p>○</p>	<ul style="list-style-type: none"> Based on evaluation results by a subcommittee specializing in security under the CSR Committee, address the following two points as a Group: 1) Stronger IT security education, and 2) Tougher measures to prevent leakage of confidential information.
<ul style="list-style-type: none"> Individualized support tied directly to core operations was given to domestic Group companies (five companies) to ensure strict compliance with the Subcontract Act. 	<p>○</p>	<ul style="list-style-type: none"> Continue to provide individualized support to business groups and domestic Group companies for strict adherence with the country's Subcontract Act. Conduct educational training on anti-monopoly laws through seminars and other means for overseas Group companies.
<ul style="list-style-type: none"> In the Industrial Process Division, we developed export control systems linked to product shipment systems, with operation of the new systems launched in January 2011. 	<p>△</p>	<ul style="list-style-type: none"> Move forward with exploring system linkages outside of the Industrial Process Division; begin introducing and operating the most cost-effective measures found.
<ul style="list-style-type: none"> Conducted an experiential safety education program in FY2010 attended by approximately 250 people, largely new hires and young employees, to promote recognition of the importance of occupational safety through firsthand experience. Emphasized "Identify and Rectify" activities via voluntary activities at each worksite. Safety and Sanitation Committees compiled and reported data on patrols conducted at each worksite. While targets at all divisions were met, the method with which patrols were carried out was shown to differ by division. 	<p>△</p>	<ul style="list-style-type: none"> For worksite patrols, in addition to setting new targets, horizontally deploy best practices across the Group and work to raise the level of activities with an eye to improvement. In risk assessment, strive to avoid omissions or shortfalls in our evaluation of latent risks in work performed. Institute consultations with industrial physicians and health checks for managers who routinely work long hours.
<ul style="list-style-type: none"> In step with training for developing in-house instructors, eight people took part in the first training module—training on instructing about low-cost management. Commenced training for worksite leaders at NGK as part of training to strengthen on-site capabilities. The first installment in fiscal 2010, held in March 2011, was attended by 15 people. Expanded eligibility for participation in practical overseas internships, with 11 people taking part in a program combining language and practical skills training. In line with commencement of the project to launch a base in Mexico, reconvened training for staff members scheduled to be sent there. To rapidly foster candidates for general manager and division director in the near future, we implemented a new seminar to train the Group's next generation of leaders. 11 people took part in the first session, which focused on learning about critical thinking skills, management fundamentals (strategy, marketing, accounting, and finance), and leadership. 	<p>○</p>	<ul style="list-style-type: none"> Revise our education systems to be more intuitive by further dividing and reconfiguring position-based training, one of our three fundamental education systems, into career education (education for new hires and promoted employees) and management education. Fully implement programs for training in-house instructors and worksite leaders, expanding those eligible to 13 people and to between 110 to 120 people, respectively. Greatly enhance English-language education to strengthen English proficiency among new employees. (Set target TOEIC score of 600 or higher within one year for new university graduate hires).
<ul style="list-style-type: none"> The percentage of employees with disabilities was 1.45%, falling below the legally stipulated rate. Three new persons with disabilities (one each in technology, general employment, and skilled manufacturing) were hired in an attempt to expand the employment rate. We amended our system for transferring jobs in the general employment pool to career-track positions, enabling 15 new people to make career-track transfers. 	<p>△</p>	<ul style="list-style-type: none"> Expand employment of people with disabilities by broadening applicable jobs beyond those in skilled manufacturing. Conduct internal PR to encourage broad penetration of our system for transferring jobs during the second year following the system's revision.
<ul style="list-style-type: none"> Various measures were enacted as scheduled in the final year of our three-year plan for shortening overall working hours. 7 employees who took advantage of our system of work-life balance support were featured on the Company intranet discussing their experiences. In recognition of the launch of a work-life balance support system and steps as a company to help it gain traction, NGK received certification as a company in the city of Nagoya that actively supports childrearing efforts (February 2011). 	<p>○</p>	<ul style="list-style-type: none"> Continue measures to date designed to shorten overall working hours, strengthening partnership with the labor union to make it easier for employees to take paid holidays. Begin system for preferentially allotting employee parking spaces within the vicinity of the headquarters to employees raising children.

Priorities in Promoting CSR	CSR Objectives	FY2010 Targets	
Implementation of fair, free and transparent transactions	Evaluate procurement partners fairly and honestly, and extensively pursue resource diversification	<ul style="list-style-type: none"> ● Begin certifying companies as NGK green suppliers. ● Cooperate with suppliers failing to meet certification standards on the following improvement efforts for eventual certification: 1) Visit suppliers to explain where improvements are required and other information. 2) Hold information sessions. 3) Reevaluate suppliers via questionnaire. ● Steps will be taken to formulate Green Procurement Guidelines and commence their operation at domestic Group companies. ● For overseas Group companies, we will explore the formulation of guidelines in collaboration with business divisions. 	
	Promote CSR procurement	<ul style="list-style-type: none"> ● Formulate Group supplier management standards as a prerequisite to CSR procurement. ● Conduct a survey on CSR procurement among the major suppliers of Group companies. 	
Preservation of global environment	Help prevent global warming	<ul style="list-style-type: none"> ● Curb of CO₂ emissions NGK: Emission volume of 131,000 tons or less (down 7% versus FY1990) Domestic consolidated: Basic unit per net sales 7% or more reduction from FY2005 	
	Adopt environmentally friendly production processes	<ul style="list-style-type: none"> ● Establish guidelines and checklists to promote energy efficiency of general-purpose equipment ● Examine feasibility of a production system capable of substantial CO₂ reductions 	
	Promote resource recycling	<ul style="list-style-type: none"> ● Curb volume of by-products generated NGK: Reduction of 25% from FY2005 Domestic Group: Reduction of 15% from FY2005 ● Ongoing introduction of MFCA 	
	Strengthen global environmental management	<ul style="list-style-type: none"> ● Set targets for reducing environmental load at overseas Group companies ● Verify achievement status of set targets at 12 overseas Group companies by January 2010, and provide necessary support 	
Coordination with local communities and promotion of contribution to the society	Provide scholarships and living assistance to foreign students	<ul style="list-style-type: none"> ● Enact trial measures to diversify foreign students receiving assistance (expand the number of eligible universities, etc.) ● Institute interactive cross-cultural exchange projects (history, skills, lifestyle, culture, etc.) between foreign students and employees. ● Promote exchange between International House (living accommodation for foreign students) residents and residents of NGK's dorm for single employees (including mutual invitation to events, participation in regional community exchange projects, etc.). ● Verify present status of former students assisted by NGK in Seoul, Beijing, Shanghai and other locations where Group bases exist to assess the activity of these students after returning to their home countries. 	
	Cooperate with local communities, labor unions, and NPOs in social contribution activities	<ul style="list-style-type: none"> ● Continuously assess and share examples of activities within the Group, and promote efforts to revitalize activities tailored to the situation specific to each company. ● Introduce "Table for Two," a menu of social contribution activities for employees. 	
	Support volunteer activities by employees	<ul style="list-style-type: none"> ● Provide information on activities of OISCA-International and examine opportunities to offer support for participants on a trial basis. 	
Communications with stakeholders	Undertake communication activities with customers and procurement partners	<ul style="list-style-type: none"> ● Continue to hold business performance presentations for major NGK suppliers. ● Operate the supplier helpline and strive to maintain fair and honest business relationships. ● Conduct visits and other activities to promote green procurement certification. 	
	Interact with local communities through plant tours and open house events	<ul style="list-style-type: none"> ● Continue responding to the requirements of each area. Increase acceptance of plant tours particularly from elementary and junior high students in the Nagoya area to encourage greater interest in manufacturing. 	
	CSR Talk Live (Discussions on implementing CSR with employees in every job position)	<ul style="list-style-type: none"> ● Continue to hold CSR Talk Live sessions and distribute a condensed version of the CSR Report to employees of NGK and domestic Group companies. ● Move forward with development of a one-stop information service by opening a gateway site for CSR information (CSR-Web) on the NGK intranet, serving as a platform for accessing various CSR information within the Group. 	

* Evaluation standards for achievement level:

○ Target achieved △ 80% or more of target achieved × Less than 80% of target achieved

FY2010 Achievements	Achievement Level*	FY2011 Targets
<ul style="list-style-type: none"> Conducted green supplier certification (May, November and March). Paid individual visits to and held presentations for suppliers that did not meet certification standards (once in September and twice in December), and offered instructions on how to meet standards in an effort to raise the certification rate. Certification was obtained by roughly 90% of suppliers targeted for certification (suppliers of materials that will be shipped outside NGK as products). Issued a new NGK Group's Green Procurement Guideline and made it available on the corporate website (February 2011). Completed preparations to extend introduction of the green supplier certification system to Group companies. 	○	<ul style="list-style-type: none"> Extend green supplier certification to include overseas manufacturers and manufacturers sourcing key materials through trading companies. Continue to request improvements from suppliers not meeting certification standards. Aim for 100% green supplier certification among suppliers targeted for certification (suppliers of materials that will be shipped outside NGK as products). Begin green procurement certification for major suppliers of Group companies.
<ul style="list-style-type: none"> Began reviewing Group companies' existing supplier management regulations. Requested improvements of Group companies as needed based on the supplier management standards formulated. Issued the NGK Group's Supply-Chain CSR Guideline and made it available on the corporate website (February 2011). Completed preparations to conduct a CSR procurement survey among Group companies. 	△	<ul style="list-style-type: none"> Conduct a survey concerning CSR procurement for major suppliers of Group companies. Assess the actual status of CSR initiatives across the NGK Group's entire supply chain.
<ul style="list-style-type: none"> Curbed CO₂ emissions NGK: Emissions volume of 136,000 tons (4% reduction from FY1990) Domestic consolidated: Basic unit per net sales 3% reduction from FY2005 	×	<ul style="list-style-type: none"> Curb CO₂ emissions Domestic: Emissions volume of less than 202,000 tons Basic unit per net sales 4% reduction from FY2010 Overseas: Basic unit per net sales 1% reduction from FY2010
<ul style="list-style-type: none"> Developed energy-saving guidelines and check sheets for compressors, with divisions operating them checking target facilities and deriving reduction measures. Knock-on effects from promoting structural innovation in manufacturing are expected to substantially cut CO₂ emission levels. Examples here include production process improvements under way for beryllium copper-wrought products and translucent alumina ceramics. 	○	<ul style="list-style-type: none"> In addition to energy-saving measures targeting compressors, develop energy-saving guidelines and check sheets for boilers and implement energy-efficiency diagnostic checks. Continue to reduce carbon emissions by promoting structural innovation in manufacturing, and promote the development of innovative energy-saving technologies.
<ul style="list-style-type: none"> Curbed volume of by-products generated NGK: 40% reduction from FY2005 Domestic Group: 23% reduction from FY2005 Introduced MFCA for two new products—hollow insulators and ceramic components for semiconductor manufacturing equipment. 	○	<ul style="list-style-type: none"> Curb volume of emissions generated Domestic: Basic unit per net sales 2% reduction from FY2010 Overseas: Basic unit per net sales 1% reduction from FY2010 Recycling rate improvement: Conduct surveys of overseas Group companies and set targets for each company. * Label items considered by-products until now as emissions from 2011.
<ul style="list-style-type: none"> Set a target within the Third Five-year Environmental Action Plan to reduce CO₂ and emissions from production activities overseas by 5% on a basic unit per net sales basis from 2010 levels by 2015. Confirmed targets were met at 12 overseas Group companies, and horizontally developed reduction measures instituted in Japan. 	○	<ul style="list-style-type: none"> Continue to horizontally promote reduction measures instituted in Japan among overseas Group companies. Coordinate issues among overseas Group companies relevant to compliance with revisions to environmental laws and regulations, and begin developing related mechanisms.
<ul style="list-style-type: none"> As in previous years, provided assistance to foreign students that included scholarships to 20 students and housing to 40 students. One of the students supported in FY2010 resulted from expansion in eligible schools. Instituted for a third year interactive cross-cultural exchange projects between foreign students and employees covering history, culture and other aspects of students' home countries. Six sessions were held in FY2010, with roughly 230 employees taking part. As part of the same project, classes were held for members of the local community by the International House (residence primarily for foreign students). 50 classes were held, with roughly 1,000 people attending. To promote exchange between International House residents and single NGK employees living in dormitories, joint disaster-readiness drills and traffic safety education sessions were held with the cooperation of local fire and police departments. Exchange opportunities were also expanded in other ways, including inviting single NGK employees to farewell parties for students receiving assistance from NGK. While we explored the creation of mechanisms for verifying the contact information and present status in home countries of former students assisted by NGK, these efforts stopped at conducting a survey only of the mechanisms in place at universities for follow-up on foreign graduates. 	○ ○ ○ △	<ul style="list-style-type: none"> Continue to provide assistance to foreign students. Continue and expand language courses and cross-cultural exchange projects conducted by students for local residents and employees to encourage two-way, grassroots international relations. Resurvey mechanisms at universities for follow-up with foreign graduates to build stronger and continuous ties with former students assisted by NGK.
<ul style="list-style-type: none"> We sought to assess the status of social contribution activities at Group companies, with the results posted on the NGK corporate website and CSR-Web intranet. (64 items) Introduced "Table for Two," a menu of social contribution activities that employees can readily take part in, at the cafeterias in the NGK headquarters and the Chita and Komaki sites. (Participation by 6,500 employees over six months) 	○	<ul style="list-style-type: none"> Work to assess the status of activities by Group companies and take steps to share information and extend activities.
<ul style="list-style-type: none"> Began providing information over the NGK intranet for OISCA-International volunteer activities and events to create opportunities for employees to participate firsthand in volunteer activities. (30 items) 	○	<ul style="list-style-type: none"> Focus on embedding and revitalizing existing activities, and develop an environment conducive to volunteer activities in which employees can readily participate.
<ul style="list-style-type: none"> Continued to hold business performance presentations for major NGK suppliers. Continued to operate the supplier helpline, although no consultations along these lines were reported. Conducted visits as well as presentations (3 times) to promote green procurement certification. Conducted visits to select and develop suppliers with outstanding QCD (80 companies). 	○	<ul style="list-style-type: none"> Hold business performance presentations for major suppliers. Continue to operate the supplier helpline and strive to maintain fair and honest business relationships. Continuously conduct visits to suppliers covering quality, green certification and all other areas.
<ul style="list-style-type: none"> Plant tours and similar activities conducted in each site area were as follows. <ul style="list-style-type: none"> Nagoya area: 5 tours (95 people, including 2 tours for 46 junior high students) Chita area: 2 tours (61 people) Komaki area: 8 tours (111 people, including 2 tours for 43 junior high students) In addition, summer festivals were held that were attended by roughly 2,000 local residents. There were fewer plant tours by elementary and junior high students year on year. At the same time, tours were given to people associated with the city of Nomi (Ishikawa Prefecture, Japan) where a new production site was located, in an effort to promote understanding of NGK. 	○	<ul style="list-style-type: none"> Give priority to responding to plant tours for elementary and junior high students to encourage greater understanding of and interest in NGK and manufacturing, and continue striving for more dynamic interaction with local communities. Implement stakeholder dialogue (November).
<ul style="list-style-type: none"> The "CSR Report Special Edition" (condensed version) was distributed to all employees of NGK and domestic Group companies, including manufacturing contract employees and temp workers. CSR Talk Live was held 11 times and encompassed six Group companies, with 479 people in attendance. In addition to explaining content found in the CSR Report, CSR Talk Live is positioned as an opportunity to entrench CSR through direct discussions between senior management and employees. Established and made available a CSR information site called CSR-Web on the NGK intranet, introducing Group employees to social contribution activities (completed and scheduled), and made CSR Committee proceedings available as part of information disclosure regarding CSR activities. 	○	<ul style="list-style-type: none"> Continue to hold CSR Talk Live and distribute condensed versions of the CSR Report to employees of NGK and domestic Group companies. Build a more robust lineup of CSR-Web content and move to turn it into a one-stop information source.

Eco Products

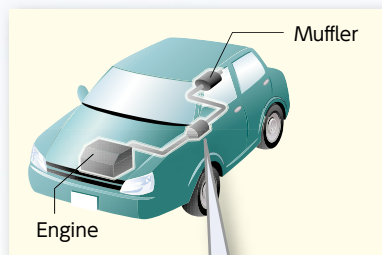
NGK continues to contribute to society through products and technologies that protect the environment.

Based on distinctive technology, the NGK Group has brought the world ceramic products that support automobile exhaust purification and many other products that contribute to a better environment. At the same time, the Group is meeting the challenge of tackling new technology fields. In these ways, we continue to contribute to society and the environment on a global scale.

HONEYCERAM (ceramic substrate for automotive catalytic converters): Purifying Gasoline Engine Exhaust Worldwide

The NGK Group produces and supplies automakers worldwide with HONEYCERAM. This honeycomb ceramic substrate contains catalysts that render nitrogen oxides (NOx), carbon monoxide, hydrocarbons, and other potentially harmful substances found in gasoline vehicle exhaust harmless.

In order to clear stricter exhaust regulations worldwide, the NGK Group is leveraging its distinctive technologies in a bid to continue contributing to improved exhaust purification performance. The result is the creation of thinner cell walls for HONEYCERAM, allowing the Group to deliver a lighter product with a larger number of cells, leading to more surface area for catalytic reactions.



6 mil/400 cpsi

6 mil



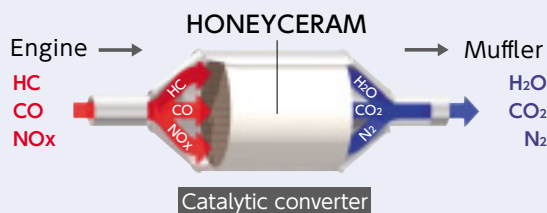
2 mil

2 mil/900 cpsi

Mil = 1/1,000 of an inch (1 inch = approx. 2.5 cm) Cpsi = Cells per square inch

Optimizing catalytic performance with a lighter product and thinner walls

A lighter catalytic substrate and more inner wall surface area translate directly into greater exhaust purification performance. When these substrates were first produced, cell wall thickness was 0.3 mm. However, in the quest to greatly increase surface area, substrate walls today have thinned to approximately 0.05 mm, about the same thickness as tissue paper.



HONEYCERAM: Supporting exhaust purification systems

HONEYCERAM is coated with catalysts that render harmful substances found in exhaust harmless. Once catalyzed, only water, carbon dioxide and nitrogen are released into the atmosphere.

Helping to reduce harmful substances in exhaust

In a year, the HONEYCERAM products that the NGK Group produces are estimated to reduce the volume of harmful substances such as NOx and hydrocarbons by the amounts listed below. (NGK estimates*1)

NOx: 4 million tons annually
HC : 1 million tons annually

Roughly **2x**
Japan's annual
NOx
emissions*2

*1. Assumes new vehicles without exhaust purification systems will be equipped with the same exhaust purification system

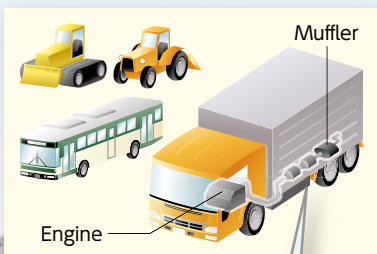
*2. Source: OECD, OECD Environmental Data Compendium 2006/2007, Air

Diesel particulate filters (DPFs): Helping diesel vehicles clear tough exhaust restrictions in Japan, Europe and the United States

Restrictions on exhaust from diesel engines found in buses, trucks, cars and other vehicles have grown progressively tighter particularly in Japan, Europe and the United States.

By further refining ceramic material, forming and firing technologies honed over the years, the NGK Group develops and produces diesel particulate filters (DPFs) that capture over 90% of the particulate matter (PM) found in diesel exhaust. The Group is also responding to the latest changes in tough exhaust restrictions.

The NGK Group is supporting the spread of clean diesel vehicles as the only manufacturer in the world that mass produces both cordierite DPFs, primarily used in trucks, buses, and specialized construction and agricultural vehicles, and silicon carbide (SiC) DPFs, used mainly in cars.



Helping prevent the release of particulate matter into the atmosphere

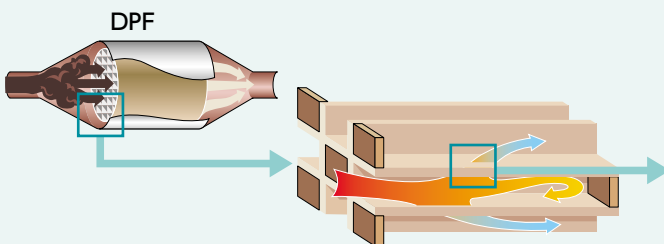
DPFs produced by the NGK Group are estimated to prevent the release of particulate matter (PM) into the atmosphere in the amounts described below. (NGK estimates*)

PM : 10,000 tons/year



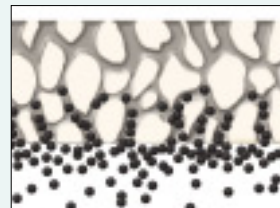
Equivalent to roughly 150,000 drums

* Assumes new vehicles without DPFs will be equipped with the same DPF



Ceramic walls trap and hold PM

When diesel engine exhaust passes through the ceramic wall, the wall acts as a filter that captures and holds PM.



Exhaust purification hinges on the balance between capture performance and permeability

Optimal control of the micro-level structure of the ceramic wall enables both high PM capture performance and exhaust permeability.

Examples of Eco Products



NOx Sensors

The world's first product capable of highly precise measurement of nitrogen oxide (NOx) concentrations at the ppm level.



NAS Batteries

Maximizes utilization of renewable energy by enabling the storage of large amounts of electric power.



Roller Hearth Kiln

This high-performance kiln saves both labor and energy through precise temperature control.



Translucent Alumina Ceramics

These translucent, durable ceramics are used in energy-saving lighting fixtures.

Eco Processes

Innovative production processes allow a substantial reduction in environmental impact at the production stage.

In addition to delivering a range of products that enhance environmental performance, the NGK Group is developing and adopting innovative technologies designed to reduce the environmental impact of production processes. In this way, the Group continues striving to protect the global environment.

NGK Group Eco Processes Generating Eco Products

The NGK Group has worked tirelessly to pursue innovation in production technology, with the aim of reducing the environmental impact of the products it creates. Group efforts include a drive to curb CO₂ emissions at every manufacturing stage, as well as the promotion of the "3R" concept (reduce, reuse and recycle), and other resource recycling measures.

The bulk of the energy used to manufacture our mainstay ceramic products is consumed at the firing stage. For this reason, the Group focuses particularly on reducing CO₂ emissions. Along with opting for higher efficiency fuels, our efforts have included promoting the adoption of heat recovery systems that utilize waste heat. Coupled with this, the Group moves constantly to develop and introduce cutting-edge technologies, including those that combine its distinctive technologies to control temperatures inside firing furnaces. In recent years, we have raised energy efficiency further by making deodorizing processes more efficient, improving heat insulating properties, and creating lighter kiln cars for use inside the furnace.

In 2011, these efforts are expected to culminate in a more than 60% reduction in CO₂ emissions from the new continuous kiln at the Ishikawa Plant (Nomi City, Ishikawa Prefecture, Japan) compared to equipment adopted for use in 1984.

● Examples of initiatives in production processes to reduce environmental impact

* Introduction to Major Topics in Recent Years





The Ishikawa Plant and its state-of-the-art production line

Promoting structural innovation in manufacturing

The NGK Group is promoting a three-year, company-wide project launched in fiscal 2009 designed to promote structural innovation in manufacturing. Under the project, the Group is reviewing fundamentals from the ground up, pushing the limits of design and manufacturing, and taking on the challenge of innovation, even while envisioning the stance it intends to have in each business line.

The express purpose of these activities is to develop resilient and efficient manufacturing sites, but they will also help to promote Eco Processes. Going forward, manufacturing processes for ceramic products will see newly developed, innovative forming and firing technologies contribute to saving both energy and resources. Similarly, processes for manufacturing beryllium-copper-wrought products should see CO₂ levels drop by 5% compared to conventional approaches by switching to the integrated production of product widths double (400 mm) those previously achieved.

Formulation of Third Five-Year Environmental Action Plan

To raise the level of its global environmental management and better contribute to society, the NGK Group has formulated its Third Five-Year Environmental Action Plan, set for steady enactment from fiscal 2011.

Overall Policies

Running from 2011 to 2015, the new plan contains initiatives for reducing CO₂ and emissions on a global scale.

Additionally, the plan will see the Group leverage its products for environmental contribution by offering a fuller range of Eco Products. Initiatives around these products will contribute to the creation of a low-carbon, recycling-oriented society that exists in greater harmony with the natural environment.

We will promote a global reduction in Group CO₂ levels.

Emissions in Japan
versus FY1990:

10% reduction

Emissions per basic
unit of net sales in
Japan versus FY2010:

20% reduction

Emissions per basic
unit of net sales
overseas versus
FY2010:

5% reduction

We will promote a global reduction in emissions generated by the Group.

Emissions discharged
per basic unit of net
sales in Japan versus
FY2010:

10% reduction

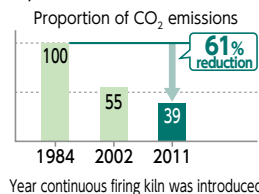
Emissions discharged
per basic unit of net
sales overseas versus
FY2010:

5% reduction

Logistics

Customers

Introduction of continuous firing kilns: Comparison of CO₂ by decade



As a result of the continuous development and adoption of cutting-edge technologies, along with repeated technological innovation efforts, CO₂ levels are expected to drop by more than 60% compared to the same process in 1984.



To reduce CO₂ emissions in logistics and the volume of waste generated from packaging, the NGK Group is aggressively adopting a modal shift in transportation and promoting the use of returnable packaging, among other measures.

Promoting environmental communication

Along with transmitting information on environmental impact and environmental protection, the NGK Group is involved in a host of environmental activities from a global perspective designed to deepen its communication with local communities and other stakeholders.



Employees from NGK-Locke Polymer Insulators (Virginia, U.S.A.) and their family members taking part in Chesapeake Bay cleanup activities (June 2010)



Guest lecture on environmental education at an elementary school (November 2010, Hirao Elementary School in Toyokawa, Aichi Prefecture, Japan)

Management

Inspiring Even Greater Confidence as a Corporation

Aiming to gain even greater trust from its stakeholders, the NGK Group is working diligently to strengthen corporate governance, promote compliance, and enhance risk management.

NGK Group Guidelines for Corporate Behavior

The NGK Group Guidelines for Corporate Behavior are a set of concrete rules to which Group members should strive constantly to adhere in realizing the NGK Group's corporate philosophy of "NGK products and technologies must create new value and contribute to the quality of life" through achievement of our business targets.

In July 2011, we completely revised the structure and content of these rules. The NGK Group Guidelines for Corporate Behavior now refer to actions that the Company is compelled to take. Individuals within the Group, meanwhile, take action in line with a new set of behavioral guidelines. These separate formulations have resulted in revised content that is more specific and intuitive, and have brought behavior guidelines more closely in line with CSR items and activities promoted by the NGK Group.

Awareness-raising efforts are also being taken to promote broad penetration of the guidelines among all employees, including through periodic study opportunities.

Corporate Philosophy (drafted in 1986)

"NGK products and technologies must create new value and contribute to the quality of life."

Guidelines for Corporate Behavior (New)

Revised July 2011

I. Realization of Corporate Philosophy Responding to the trust and expectations of society

1. Provision of Products that Contribute to Better Social Environment

From a long-term global perspective, we will commit ourselves to create new value by providing products and services that protect the global environment and realize safety and security in the society. We will gain trust from our customers and society by seeking quality and safety.

II. How to Engage in Business Activities Act with sincerity from a strong ethical stance

2. Disclosure of Corporate Information

We will release, in an accurate and timely manner, any information sought by the public; including information on our management, finance, products and services to improve transparency in management and to gain society's trust in the NGK group companies.

3. Thorough Enforcement of Compliance; Risk Management

We will abide by the laws and rules of each country and area and will enforce our compliance thoroughly, respecting international arrangements that are applicable to us. We will develop human resources who are sincere and have a high ethical standards. In addition, through our efforts to build an internal control system and implement risk management, we will protect our corporate assets and credit, as well as rights of third parties.

4. Respect of Humanity and Assurance of Comfortable Working Environment

We will hire and treat our people in a proper and fair manner and will provide a safe and pleasant working environment in which our people can work comfortably without sacrificing their family life.

We will make available the place and opportunities that can be challenged by people with versatile talent and will support the development of human resources through acquisition of knowledge and expertise. We will prevent any bullying, discrimination, harassment or other acts that violate human rights and, if there is any violation, we will take appropriate actions in an expeditious manner.

5. Implementation of Fair, Free and Transparent Transactions

As a good and equal partner, we will implement fair, free and transparent transactions in search of co-prosperity with our business partners. In addition, we will promote our commitment to discharge corporate responsibility for the society throughout the supply chain of the NGK group companies.

III. As a Member of Society Sustainably develop in partnership with society

6. Preservation of Global Environment

We will contribute to the preservation of the global environment by committing ourselves to take the lead in reducing environmental burdens at every location and in every process that is involved in our business activities.

We will cooperate in efforts with local communities to preserve the environment and will also actively support our employees' effort for such purposes.

7. Coordination with Local Communities and Promotion of Contribution to the Society

We will actively commit ourselves to the contribution of society, satisfying the needs of the local communities with our interest in social tasks required by the countries, and local communities, with our objective to become a corporate citizen that can be trusted by the local communities.

8. Communications with Stakeholders

Through communications with all of our stakeholders, such as our customers, business partners, shareholders, employees and members of the local communities, we will expand their understanding of NGK group companies and will review corporate activities based on comments forwarded to us and will use them in our effort to accomplish our social responsibilities.

Guideline Items

Priorities in Promoting CSR

1. Provision of products that contribute to better social environment

2. Disclosure of corporate information

3. Thorough enforcement of compliance; risk management

4. Respect of humanity and assurance of comfortable working environment

5. Implementation of fair, free and transparent business transactions

6. Preservation of global environment

7. Coordination with local communities and promotion of contribution to the society

8. Communications with stakeholders

Highlight

Information Security

Global Promotion of NGK Group IT Security Standards

● Joint Promotion by NGK and All Group Companies

To ensure the proper management and use of information assets, the NGK Group CSR Committee's Security Subcommittee takes responsibility for supervising overall information security, and supports the General Affairs and Information Systems divisions in their efforts regarding personal information and document security control, IT network security control, and other issues.

The rapid pace at which information and communications technology and devices have evolved in recent years has led to gaps in the level of IT security management among Group companies in terms of systems and operations, security education, and other areas. This situation has made the quest for consistent IT security on a Group-wide level an urgent concern.

For this reason, we conducted a survey in October 2009 of the status of IT security measures at each Group company, with the goal of developing an IT security structure based on commonly shared Group standards. Based on the results of the survey, in August 2010 we formulated the NGK Group IT Security Standards, consisting of regulations, countermeasure guidelines, and self-diagnostic sheets shared by all Group companies. Copies of the standards were distributed in

Japanese, English and Chinese. From August, all Group companies conducted risk assessment and self-diagnosis based on a checklist of 300 items, creating countermeasure guidelines ordered by priority and tailored to their specific business formats and security status. The companies then drafted action plans for countermeasure enactment in order to systematically improve their IT security level.

Furthermore, to advance these standards in the shortest time possible, the Information Technology Department and Corporate Strategy Office paid visits directly to Group companies worldwide to explain the rationale for formulating standards, the importance of having such countermeasures, and regulation details. At the same time, the department and office provided support for conducting risk assessment and enacting countermeasure action plans as part of meticulous initiatives that were carried out.

In fiscal 2011, visits will again be paid to Group companies to follow up on the enactment status of countermeasure action plans formulated in the previous fiscal year. Outcomes will then be evaluated to raise performance levels further.

● Toward Stronger IT Security Measures

In fiscal 2010, we took steps to reduce the risk of information leaks associated with removable storage media by limiting the storage of information on USB memory and other removable storage media and extensively managing the possession of such devices.

In terms of IT security education, in addition to group training on the topic for new recruits and employees newly promoted to supervisory and management posi-

tions, we implemented e-learning-based training for all PC users. We also held presentations for PC network managers in every division in order to further raise awareness of the recently revised regulations and guidelines concerning IT security measures.

In fiscal 2011, we intend to enhance training on IT security at Group companies, thereby boosting consciousness regarding IT security.



Comments from Information Technology Department Personnel

At Group companies in China, the issue we faced was that while interest in IT security was high among managers and supervisory personnel, the kinds of initiatives that should be taken remained unclear. The adoption now of the IT Security Standards has enabled every company to clarify the measures needed and to take steps to systematically improve its level of security.

Shigeki Hayashi Manager, Information Technology Dept.

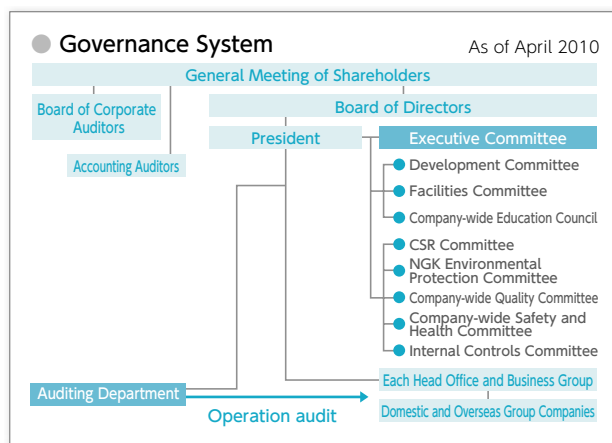


Corporate Governance

Basic Policy on Corporate Governance

The NGK Group has developed and maintains an organizational structure capable of ensuring the legality of business activities and transparency of management, while quickly accommodating changes in the operating environment. The Group has also established and maintains shareholder-oriented management systems capable of the timely and appropriate disclosure of required information.

NGK's Board of Directors has external directors (two as of June 29, 2011) and the Board of Corporate Auditors has two external corporate auditors. These independent officers offer suggestions across the full range of NGK management.



Internal Control Systems

The NGK Group had developed and maintains an internal control system based on a resolution of the Company's Board of Directors in May 2006 (partially amended in May 2008 and April 2010).

Regarding the internal control reporting system estab-

lished in accordance with the Financial Instruments and Exchange Act, this system for enhancing the effectiveness, efficiency and reliability of operations, as well as proper operational evaluation, is being developed primarily by NGK's Internal Controls Committee.

Compliance

Initiatives to Entrench and Ensure Compliance

The NGK Group realizes that entrenching and ensuring compliance is critical to raising corporate reliability, and the CSR Committee's Compliance Subcommittee plays a central role in compliance education and awareness.

In fiscal 2010, we sent out a survey to gauge compliance awareness among all employees, including temporary and part-time staff, at NGK and domestic Group companies. The survey was also taken by employees from NGK on loan to overseas Group companies. Over

80% of those targeted responded. Once analyzed, the results revealed that awareness around compliance has increased steadily since the previous survey was conducted in fiscal 2008.

Furthermore, we worked to gain a shared awareness of the issues surrounding greater propagation of compliance within the Group through a series of dialogues with management-level staff in each division.

Enhancing Compliance Education

In fiscal 2010, more than 1,350 people took part in six Legal Compliance Liaison meetings, where a wide range of workplace managers were provided legal explanations and case studies on compliance. Lectures on anti-monopoly laws led by outside instructors were also conducted in the vicinity of our head office and at our headquarters in Tokyo. The well-developed educational content of the training included the use at certain times of videos showing everyday examples of compliance issues.

Compliance education for regular employees incorporates group debates as part of position-based training. Training for staff members scheduled for assignment overseas focuses on anti-monopoly and competition-

related laws, and has seen the adoption of curriculums tailored to China, Mexico and other regions in an effort to approach compliance issues more meticulously. Internal bulletins, meanwhile, offer intuitive explanations of the basics of Japan's Subcontract Act and the execution of contracts. In these and other ways, compliance-related awareness and mechanisms are being broadly embedded throughout the Group.

For domestic Group companies, in addition to requesting the participation of supervisory personnel in Legal Compliance Liaison meetings, the NGK Legal Affairs & Intellectual Property Department, among other tasks, provides individualized instruction on laws and

regulations relevant to business transactions.

To strengthen legal risk management in overseas Group companies, NGK continues to operate a periodic reporting system launched in fiscal 2009, under which all Group companies report and share information on the state of their legal risk management responsiveness every six months.

In fiscal 2011, we will move to enhance compliance education further among domestic Group companies. Lectures on EU competition law are also scheduled for supervisory personnel at Group companies in Europe.



Mizuho, an internal bulletin used for in-house education and training

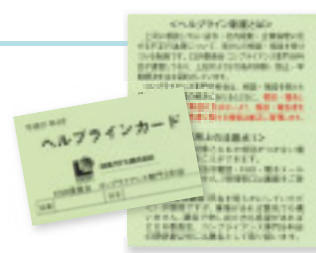
Operation of Helpline System

To ensure compliance with laws, internal regulations and corporate ethics, NGK has established a helpline system as a compliance aid for directly accepting consultations and reports from NGK Group and domestic Group company employees (excluding those at listed firms) and other concerned parties.

To ensure effective operation of the helpline, the Company has arranged to provide protection for those seeking consultation, extensively guarantee fairness of procedures, and facilitate access by preparing five points of contact, including an outside lawyer and a consultation channel exclusively for women.

All employees eligible to use the helpline are issued a

helpline card, and we consistently strive to deepen employee understanding of the system. At overseas Group companies, since fiscal 2008 we have established and operated individualized systems or provide alternative measures that comply with local laws and other requirements. In fiscal 2010, NGK's Legal Affairs & Intellectual Property Department conducted a follow-up on the operational status of the helpline and measures, in consideration of the unique customs and differences in awareness present in each country.



A helpline card

Risk Management

Continuously Raising the Level of Risk Management

The NGK Group works to enhance the level of risk management in an effort to minimize the increasingly global and diversifying risks associated with business expansion.

Potential risks from business operations are comprehensively examined and analyzed during the process of budget and plan discussion and enactment finalization by the Strategy Committee, Executive Committee and other bodies, with an eye to avoiding or preventing risks. The Central Disaster Prevention and Control Headquarters and CSR Committee are charged with responding to emergency situations involving wind or water damage, earthquakes, or large-scale catastrophic events related to transportation.

In fiscal 2007, we introduced a control self assessment (CSA) questionnaire and risk management mecha-

nisms based on this instrument at all domestic Group companies, with the aim of countering risks in day-to-day business operations by improving the workplace practices at the root of such risks. The questionnaire is conducted at either NGK or the domestic Group companies every other year, with the latter targeted with the questionnaire in December 2010.

In addition to measures enacted by each division based on an analysis of questionnaire results, divisions specializing in risk propose response measures whenever a companywide response is required, with the action plan for implementation reported to the CSR Committee. The committee then follows up on plan progress every six months, with the status at each point shared with top management and other committee members.

Implementing Checks of CSR Activities

In fiscal 2010, an external consultant (KPMG AZSA LLC) was brought in to perform a check of NGK Group CSR activities in order to assess the level of and any issues present in such activities.

By and large, the evaluation suggested that the Group's CSR activities are moving steadily apace. It pointed out the need, however, to expand the scope of collection and confirmation of personnel data to encompass Group companies worldwide, as well as the need to proactively publicize meaningful activities already taken. The content of this evaluation was reported to the CSR Committee and other relevant departments, and made available to employees via CSR-Web, and will serve as a reference for future CSR activities.

Creation of New Value

Utilizing its proprietary advanced ceramics technology, the NGK Group works to contribute to a better society, and provide products and services that deliver new value to society.

Highlight

PACE Award for Development of NOx Sensors

● Automotive sensors that measure vehicle NOx concentrations in real time

In April 2010, NGK and Continental AG (Germany) were joint recipients of a PACE* Award for the development of high-precision automotive NOx sensors. The prestigious PACE Awards are sponsored by *Automotive News*, a major U.S. magazine specializing in automobiles. Awards are given to suppliers for their contribution to the automotive industry through the development of innovative technologies.

NOx sensors are the world's first sensors capable of measuring concentrations of nitrogen oxides (NOx) in real



Commemorative PACE Award trophy



Joint receipt of award in the Product Europa category with Continental AG

time at the parts per million (ppm) level. NOx is a component of vehicle exhaust implicated in photochemical smog, acid rain and other atmospheric pollution. The sensors have been credited with making possible fuel-efficient, clean diesel vehicles capable of clearing increasingly strict vehicle exhaust regulations.

Greater demand is projected for NOx sensors going forward, especially in Europe and the United States. As products that contribute to protecting the global environment, NOx sensors from NGK are ready to meet the expectations of society and our customers.

* PACE: Premier Automotive Supplier's Contribution to Excellence



NOx sensors

Awarded Incentive Award of the Commissioner of Japan Patent Office

In October 2010, NGK's NOx sensors received the Incentive Award of the Commissioner of Japan Patent Office and the Achievement Award at the Chubu Local Commendation for Invention, sponsored by the Japan Institute of Invention and Innovation (JIII). The sensors were highly rated for their technological superiority and efficacy, as well as for their contribution to the development of local industry.

Development of Alumina-based Coulomb Electrostatic Chuck

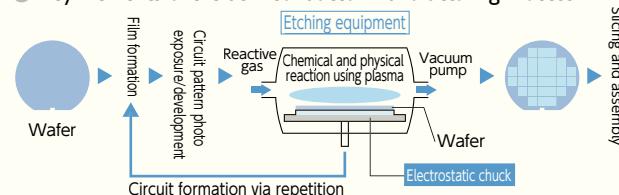
Electrostatic chucks are sought after as core components inside semiconductor manufacturing equipment, where they are used as stands on which semiconductor substrates — known as wafers — are placed. NGK has developed alumina-based Coulomb electrostatic chucks that use the Coulomb force (electrical attraction) to hold wafers in place.

High dielectric resistance is achieved by turning high-purity alumina (aluminum oxide) into dense crystals. The strength of the adhesive force (Coulomb force) is such that there is little current leakage even at high voltages, resulting in less damage to wafers. Furthermore, NGK's pursuit of the extreme limits of thinness has raised thermal conductivity, making it possible to uni-

formly adjust the temperature of wafers as large as 300 mm in diameter.

Leveraging the superior characteristics of ceramics, NGK is contributing heavily to improved productivity in the semiconductor manufacturing process, where cutting-edge technologies compete.

● Key Elements of the Semiconductor Manufacturing Process

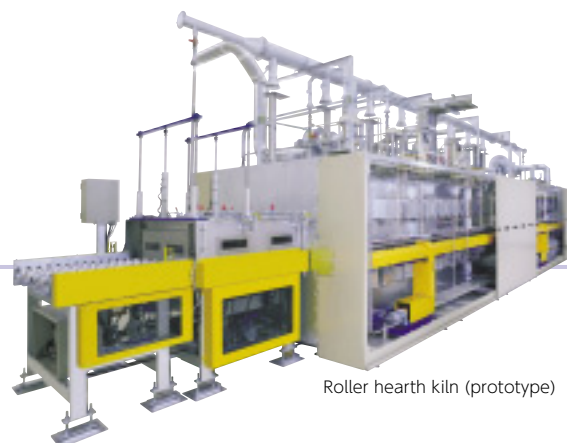


Development of High-Performance Firing Kiln for Lithium-ion Battery Materials

The roller hearth kiln developed by NGK is a high-performance kiln used to sinter a variety of powdered materials, including cathode materials for lithium-ion batteries. Such batteries are expected to experience an expansion in demand for use in cars in the future.

The firing chamber is divided into smaller parts by shutters, enabling different atmospheric conditions using nitrogen or oxygen gas to be set in each smaller chamber. Heat can then be applied individually, allowing for extremely precise temperature control and making uniform heat application and diverse temperature curves possible.

Furthermore, ceramic parts are used in the transport structure where metal rollers and containers holding powdered materials come into contact. This step helps keep metal dust caused by friction from inadvertently



Roller hearth kiln (prototype)

mixing with target materials. This is just one example of the close attention NGK has given to preventing contamination from foreign substances inside the kiln.

Moreover, in combination with proprietary heat simulation software, NGK is now able to analyze the optimal conditions needed in 1/50th the time once required, greatly shrinking lead times for developing new materials.

In addition to cathode materials for lithium-ion batteries, the new kiln is enabling higher performance and more efficient development of materials such as barium titanate, magnesium oxide, phosphors for flat display panels, and ceramic capacitors.

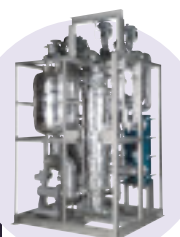
Development of World's First Water Separation Membrane for Treatment of Acidic Liquids

Using ceramic separation membranes, NGK has developed a system for recovering water content from solvents. This technology is scheduled for commercialization in fiscal 2011.

The system uses the world's largest ceramic separation membrane (membrane area of 15 square meters) with pores under 1 nanometer (1 billionth of a meter) capable of separation at the molecular level. Offering high corrosion



Ceramic membrane element
(diameter: 180 mm, total length: 1,000 mm)



System for separation
of water content
from solvents
(test plant)

resistance to solvents, acidic and alkali materials, the membrane is suitable for use with a wide range of liquids and pH levels. The membrane is also the first in the world with pores under 1 nanometer to be capable of treating acidic liquids.

Presently, the separation of water content from solvents is largely performed through distillation, which requires both a tremendous amount of heat energy and large equipment area. Separation via membrane, however, requires very little heat to operate, enabling a reduction of anywhere from one-tenth to one-half in both energy consumption and CO₂ emissions compared to the distillation method. The area required for installation can also be cut almost in half.

The new membrane system is expected to be used in a range of applications, including the recovery of acid from acetic acid and other acidic liquids, and the separation and reduction of water content from liquid containing solvents — such as water-soluble paint waste liquid — and volatile organic compound (VOC) solvents.

Development of Human Resources Able to Create, Protect and Nurture Intellectual Property

The NGK Group encourages the creation of intellectual property, and works to ensure its proper preservation and use, based on a policy of respect for the rights of others. Our business, research and development, and intellectual property divisions collaborate closely with the goal of building competitive advantage for the Company.

In fiscal 2010, we strengthened our patent filing and intellectual property protection efforts in the Chinese market. We also established a Trademark Liaison Committee to manage NGK Group trademarks and bolster their strategic development. Additionally, we adopted an e-learning component as part of intellectual property training for personnel involved in this area. We

also continued to promote our crash course on inventions, offering practical seminars using real-world examples and teaching participants the skills needed to patent inventions.

In fiscal 2011, together with making these education programs more robust, we intend to expand and upgrade our managerial-class awareness programs to sharpen intellectual property strategies at business and R&D divisions.



Presentation on patent map utilization (June 2010)

With Our Customers

The NGK Group provides high quality, reliable products to its customers.

Highlight

Company-wide Quality Activities Striving for quality from the customer's perspective



Satoshi Kaneko
General Manager,
Quality Management Dept.

● Creating Quality from the Customer's Perspective

In recent years, products incorporating functional ceramics have assumed greater weight among the NGK Group's range of products. This situation is prompting the need to incorporate adequate quality assurance from the initial design stages, taking into account how these products are actually being used and the associated risks.

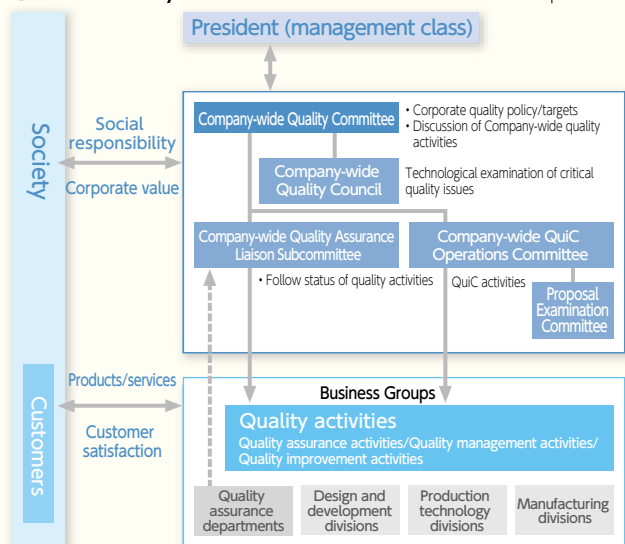
To meet this challenge, we are moving to thoroughly eliminate risks from quality defects by bringing together NGK's manufacturing-side perspective with issues from the customer's standpoint, then implementing a definitive process that lays out a clear checklist of important quality-related items for our products.

● Company-wide Design Review to Thoroughly Eliminate Quality Risks

In fiscal 2010, the Company-wide Quality Committee began carrying activities forward under the newly established Quality Management Department. The aim of these efforts is to first rate product reliability by accurately capturing needs pertaining to product usage by customers and their expectations. The next step is to briskly promote Company-wide quality initiatives by reflecting those needs in product design. We established a new Company-wide Quality Council and held a Company-wide design review (DR) conducted by our in-house engineers that will enable quality to be evaluated from a third-party perspective. Important quality

● Governance System

As of April 2011



issues are examined from an expert standpoint, together with more robust debate than ever from an objective viewpoint that is also closer to customers. The result is a multifaceted system of checks to determine whether customers will be satisfied with the level of quality. The level of DR that takes place in each business group is also being improved through a stronger awareness of the customer's perspective.

● Promoting Quality Education from the Customer's Perspective

Education is vital to bolstering and promoting company-wide quality initiatives. In fiscal 2010, we concentrated on various quality education efforts, including reconfirming risk analysis techniques and other fundamental knowledge among young design engineers, and offering individualized practical guidance built on practical risk prevention training. In fiscal 2011, the Head Office and each business group will advance efforts to develop human resources that not only know DR around

specialized technologies, but possess a wide range of knowledge and the capacity to evaluate and analyze quality from the customer's perspective.

Along with vigorous discussion of quality going forward, the NGK Group will strive to meet the trust and expectations of its customers by actively moving closer to customers and further enhancing its ability to perceive issues that previously went unnoticed.

Quality-related Initiatives

Guided by a Company-wide Quality Policy that puts customers first, the NGK Group considers the provision of products that contribute to a better quality of life to be one of its most important missions. In addition to the pursuit of quality that satisfies customers (in terms of

product quality, cost and delivery), the NGK Group carries out activities aimed at improving a comprehensive conception of corporate quality that includes the creation of products that appeal to customers, recognizing this as one of its social responsibilities as a corporation.

Company-wide Quality Policy

With foremost emphasis on quality, the NGK Group is striving with customers to provide reliable and useful products and services to the public.

Company-wide Quality Targets (Fiscal 2011)

Eliminate quality defects through stronger DR <Extensive DR after product alterations/changes>

Company-wide Quality Activities

Quality control-related indicators at the NGK Group in fiscal 2010 moved toward improvement, both for customer complaints and defects arising from the manufacturing process. Going forward, we will continue to enhance risk prediction and DR from the initial design stage and improve and strengthen quality control with

the aim of eliminating quality defects.

New standards with regard to quality activities will be formulated in fiscal 2011, along with the development of new quality activity rules for Group Companies in Japan and overseas.

Quality Education

The NGK Group promotes quality education through manufacturing training and position-based training conducted by the Human Resources Department and on-site training and group training conducted by the Quality Management Department.

The subjects taught in manufacturing training include methods for improving quality, while position-based training provides education related to quality assurance

and methods for improving quality commensurate with each job position level.

On-site training was conducted along the theme of how to promote quality improvement activities and pointers for making proposals, while DR Level Up Seminars and lectures on attitude improvement among other subjects comprised the group training sessions.

QuiC Activities

QuiC (Quality up innovation Challenge) activities, in which all employees take part, form the basis of the NGK Group's quality improvement activities on the manufacturing floor. These QuiC activities, which as an outcome include proposal activities, are conducted in small groups throughout the company and challenge all employees to be innovative in their pursuit of quality.

Participation in NGK proposal activities was about 100% for the manufacturing divisions and around 75% for the non-manufacturing divisions in fiscal 2010. Approximately 41,000 proposals were submitted, a 10% increase over the previous year. Even a team from a Group Company in China participated to present examples of their success in a Company-wide presentation, held in July 2010, featuring teams selected from each division. Going forward, these various examples of

improvement will be compiled as a database on the Company's information sharing system for employees to utilize in raising the level of QuiC activities.



The Company-wide presentation for fiscal 2010 QuiC activities (July 2010)

With Our Employees

The NGK Group believes that the Company's growth depends on the growth and well-being of our employees, and we work to adapt our human resource development to changes in society, ensure fair personnel practices, and provide a safe, comfortable workplace environment.

Highlight

Global Personnel Development Nurturing Globally Successful Human Resources

Report

Overseas Internship
(Trainee) Program

"The overseas internship (trainee) program enabled me to surpass my goals for honing my technical, English language, and communication skills."



Kiyotada Aoyama
Engineering Dept.,
Electrical Insulator Div.,
Power Business Group

As part of the first class of trainees in the overseas internship (trainee) program, I had the opportunity to train in Canada and the U.S. for six months starting in April 2010. My goals were to improve my English skills and presentation skills as a sales engineer (SE), setting my sights on carrying out technical negotiations. The specific objective of my training was to develop an understanding of

design technologies for polymer insulators and give presentations in English for customers, with the view to developing the ability to conduct actual negotiations on technical issues in English.

Following a six-month global training program in Japan, I spent the first two months in Canada for English language training. Next, I began my overseas internship as an SE at U.S.-based NGK-Locke Polymer

Insulators, Inc. (NLPI, Virginia), an NGK Group company.

Having completed intensive preparatory training in Japan and Canada, I entered NLPI with confidence. However, I was shocked to discover that my English was not understood and my self-confidence collapsed all at once. However I actively interacted with the local engineers and eagerly studied design technologies. At the same time, I voluntarily asked my American supervisor for the opportunity to gain experience in giving real presentations to customers. By repeatedly participating in presentations, I was able to restore my self-confidence. In the U.S., presentations generally involve dialogue with the audience with an emphasis on discussions. By becoming proficient in this method of presentation, I developed the ability to respond properly to technical questions, an area I initially struggled with. I received positive responses from customers, such as "your presentation gave us a better understanding of the reliability and advantages of NGK products compared with what other companies offer." There was one case in which a presentation led to an actual order. In these ways, I was able to achieve more than I originally aimed for.

Looking ahead, I hope to continue to sharpen my language skills and technical knowledge as a global asset that can be stationed overseas at any time.



Presentation at NLPI (October 2010)



Presentation for a customer (October 2010)

For further details on employee initiatives,
please visit the NGK Group's corporate website.

Web <http://www.ngk.co.jp/english/csr/>

● Accelerating the Development of Young Employees Through the Overseas Internship (Trainee) Program

The NGK Group is expanding its business around the world, and the number of countries and regions where it operates has been increasing year after year. Going forward, we expect increases in the number of key personnel posted to overseas locations and the number of overseas business trips. Consequently, one key priority is to develop human resources with an expansive outlook and who can be successful worldwide.

To address this priority, the NGK Group set up a Global Personnel Development system in 2007 as an independent training program. Initially, the main emphasis was on training the latest candidates for overseas postings. However, the NGK Group strengthened its training activities with the addition of the overseas internship (trainee) program in 2010. This program was designed to provide systematic training of candidates from an earlier stage, focusing specifically on young engineering personnel.

Previously, engineering personnel were stationed overseas at a later stage than employees in administrative and sales positions. Generally, engineering personnel were posted overseas after the age of 30. The overseas internship (trainee) program is designed to give engineering personnel the opportunity to experience business overseas, starting from their second or

third year with the company. The objective of the program is to have these engineering personnel proactively go overseas and take a direct look at local market needs, with the view to quickly training personnel who can actively make proposals.

In fiscal 2010, we posted 11 employees, mainly young engineering personnel in their late twenties, to overseas Group companies in the United States, Europe, and China. The first two months concentrated on building language skills, after which the trainees began practical skills training under the internship program. This training, with the support of local staff, focused on the solving of problems each trainee had set themselves.

Just a few examples would include the establishment of new technical initiatives in Poland, efforts made in support of the instructor training program in the United States, and overcoming the language barrier to solve problems in China.

Under this program the trainee improves their communication skills and makes considerable progress in their practical ability by addressing challenges set in an environment different to what they are used to. Each trainee came away from the program having made clear progress in their professional development.

● Global Seminar for Staff Scheduled for Assignment Overseas

There are currently around 160 staff members assigned overseas to Group companies and representative offices in 15 countries. Every year we rotate 30 to 40 of these positions to give other employees the opportunity to experience working outside Japan.

The seminar covers a range of subjects, such as language instruction, cross-cultural exchange, the giving of presentations, and meeting management in order to give those taking part a grounding in the business skills necessary for performing their duties once assigned overseas.

In fiscal 2011, a large number of employees are scheduled to be assigned to Mexico as we begin operations at our new manufacturing subsidiary NGK CERAMICS MEXICO, S. de R. L. de C. V. As this is the NGK Group's first base in the country we have little knowledge of how

to conduct business in Mexico. The focus was therefore on how best to tailor training to match local business conditions.

In March we invited 10 Mexican managers, due to start at NGK CERAMICS MEXICO, to Japan for training at our main plant. We took this opportunity to arrange a cross-cultural communication program between these managers and Japanese staff members headed for the Mexico facility. Through this exchange, both sets of employees were able to get to know one another's culture in what was a very hands-on experience.



Cross-cultural
Communication
(March 2011)



Comments from Global Education Personnel

The first crop of internship trainees exceeded all expectations. Going forward, we will develop the educational content of the program further in an effort to better address the desired goals of potential trainees. An internship is an excellent way to improve your skill set and is a challenge worth taking.



Akira Maruyama
Manager, Human Resources Dept.

Developing Human Resources

NGK considers people to be its most critical resource, and we devote our energies to developing

the next generation of employees, while respecting their desire to improve and their motivation.

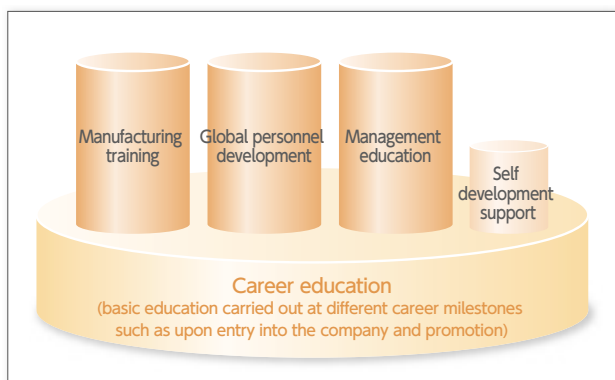
Basic Structure of Company-wide Education System

From fiscal 2011, our education systems will be revised to make them more intuitive by further dividing and reconfiguring position-based training, one of our three fundamental education systems, into career education (education for new hires and promoted employees) and management education.

Career education will form the basis of the overall system and serve to fortify and strengthen our corporate culture. The content of training is tailored to different career milestones and includes instruction in company policy and key issues facing management, the fostering of an understanding of the responsibility of each relevant position, and a grounding in the fundamentals that each

employee of the company must be familiar with.

Built upon this career education platform will be our three education systems: manufacturing training, global personnel development, and management education. The aim of the first, manufacturing training, is to strengthen on-site capabilities and ensure the transition of technology and skills to the next generation of NGK engineers. The second system, global education, is geared towards the nurturing of personnel associated with overseas operations. The objective of the third system, management education, is to develop management ability and leadership skills in managers.



Toba General Training Center (Toba City, Mie Prefecture, Japan)

Responding to Changes in Manufacturing Workforce Composition

From fiscal 2005 onwards, the NGK Group regularly promoted an education program for strengthening on-site capabilities (the ability to act independently in identifying problems and developing appropriate solutions and improvements) aimed at leaders on the front line of our on-site operations. We have used this program to educate staff on improvements such as decreasing inefficiencies in on-site operations.

The past decade has seen major changes in the composition of our workforce. Large numbers of older, experienced employees have reached retirement age to be replaced by new hires and manufacturing contract employees. A direct consequence of this change has been an increase in the proportion of employees with little or no experience at NGK. As a result, our on-site leaders, in addition to spearheading improvement initiatives, are also relied upon to provide guidance and development support to the younger employees.

From fiscal 2011, we will implement training for worksite leaders, the central component of our on-site teams, focused on improving leadership qualities and communication skills.



Manufacturing Training Fundamentals Class (September 2010)

Initiatives in Employment and Human Rights

The NGK Group works to provide a comfortable, safe workplace environment for its employees, while respecting their fundamental human rights. Hiring is based on a policy of stable employment and equal opportunity, but

also aims to encourage employee autonomy and independence, and to provide fair treatment based on their contribution to the Company. We have implemented the human resource systems necessary to achieve those goals.

Supporting a Better Balance Between Work and Home Life/Childrearing

In March 2010, NGK revised its human resource system in order to enable employees to continue working while caring for children or family members, by enhancing both financial support and time considerations. The system now combines an array of options and policies that make it easier for employees to maintain an ideal work-life balance.

In fiscal 2010, 19 employees took advantage of our system



Award Ceremony for Certification by the City of Nagoya as a company that supports childrearing efforts (February 2011)



Certification mark for use on corporate literature

offering shortened working hours for those with children in the third grade of elementary school or younger. Ten male employees took child care leave. Half-day paid leave, another new addition, was taken a total of 4,300 times over the course of the year. Cash assistance providing a maximum of ¥100,000 per year for babysitter expenses was another popular system, being used on no less than 84 occasions. Another new measure introduced in fiscal 2010 was to preferentially allot employee parking spaces within the vicinity of the headquarters to employees raising children.

To give employees a better idea of the potential benefits we have posted comments by employees who have taken advantage of this system on the work-life balance support site on the Company intranet.

In recognition of the launch of a work-life balance support system, NGK received certification as a company in the city of Nagoya that actively supports childrearing efforts.

Striving for Employment Diversity and Equal Opportunity

NGK employs personnel without regard for race, nationality, belief, gender, or disability, and is striving to achieve an equal opportunity workplace.

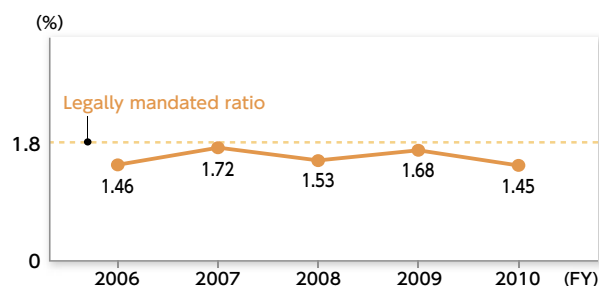
As of March 31, 2011, women accounted for roughly 13% of NGK's workforce. This figure includes 8 women in management positions, out of a total of 738 people in such positions. Over the five-year period since 2006, of the 1,091 people hired as regular employees, 166 (15%) were women.

Where employees with disabilities are concerned, the percentage of employees with disabilities throughout fiscal 2010 was 1.45%, falling below the legally mandated ratio of 1.8%. Previously our efforts in this area had concentrated on manufacturing positions. However, going forward, we will systematically implement a number of measures aimed at strengthening initiatives, such as the broadening of job types for which applicants with disabilities can be hired to include technology and general employment positions, and remain committed to expanding employment opportunities in the spirit of laws covering employment of people with disabilities. In April 2011, two new persons with disabilities (one each in

technology and general employment) were hired by NGK.

Our policy regarding stable employment is based upon personnel plans drawn up after considering business trends, including those affecting Group companies, the impact of productivity increases, and other factors. We then use these plans to make hiring decisions from a medium-term perspective.

Change in Percentage of Employees with Disabilities



Targeting Fulfilling Careers for Women

NGK aims to create workplaces that offer fulfilling roles for women employees. In fiscal 2010, we reviewed our system for transferring from general employment jobs to career-track positions and clarified the conditions under which such a transfer is possible. One of the reasons for this change was to increase opportunities for motivated women with the requisite abilities, focusing particularly

on employees in their thirties, to apply their skills in a career-track role.

As a result of this initiative, 15 of the 33 applicants in fiscal 2010 passed the requisite examinations and became eligible for transfer compared to the two or three employees selected annually under the previous results-based criteria.

Utilizing Diverse Human Resources

In fiscal 2010 NGK sought to strengthen those human resources central to its manufacturing site from the prospective of employee evaluation and treatment. In 2007 a number of manufacturing contract employees were subsequently hired as regular employees. Of these regular employees, the most promising were offered a double promotion.

In addition, we also began payment of benefits to 111 worksite leaders at the same time as initiating a new course of training for worksite leaders covering a range of themes including occupational safety and health, labor management, and compliance.

Utilizing Individuality and Skills

To open the way for employees to take full advantage of their individuality and skills, NGK operates an internal job application system and the internal Free Agent (FA) system. In fiscal 2010, five positions were advertised through the internal job application system, of which three were filled.

Under the follow-up system for younger employees, we held interviews with around 230 high school

graduate-level and 100 university graduate-level employees. We provide comprehensive support to our younger employees with the intention of further improving working conditions and creating a more comfortable workplace.

System for Rehiring Employees after Retirement

In an effort to present employment opportunities for senior workers, since April 2001, NGK has adopted a system for rehiring ordinary, regular employees after their retirement. From April 2007 we expanded the

scope of this system to include employees in managerial positions. As of March 31, 2011, we had 276 rehired employees, accounting for 7.0% of the total workforce.

Supporting Mental and Physical Health and Work-Life Balance

NGK has always emphasized the importance of promoting the health, both physical and mental, of its employees. We are improving mechanisms, put in place to facilitate the return to work of employees after long-term absence due to illness or injury, in order to remove the stress and anxiety associated with such a return and allow employees to concentrate fully on their recuperation.

In fiscal 2010, NGK conducted interviews and questionnaires on health-related issues with 30 employees posted overseas, mainly in China. Steps were also taken to raise awareness of such issues as part of manager training and position-based training.

Respect for Human Rights and Preventing Harassment

The NGK Group prohibits harassing behavior (for example, sexual harassment or power harassment) by employees, which is injurious to individual dignity and interferes with workplace order and business execution, and takes disciplinary action in response to any violations. We are

implementing various measures in this area, such as incorporating lectures and position-based training as part of efforts to prevent harassment.

Labor-Management Relations

NGK is building labor-management relations founded on mutual trust where both labor and management fulfill their respective responsibilities. Through communication with various consultative bodies, such as the Labor-Management Advisory Board, the Office Advisory Board and the Regular Labor-Management Council, both sides actively and constructively exchange opinions based on a mutual relationship of trust.



The Labor-Management Advisory Board (February 2011)

Occupational Safety and Health Initiatives

Safety and health form the foundation of a company's existence, and ensuring safety and health is one of a company's fundamental responsibilities.

NGK strives to minimize hazardous risks and prevent occupa-

tional accidents by obeying laws and regulations and by partnering with employees to conduct activities in line with our Occupational Safety and Health Management Systems (OSHMS*). In this way we are working to ensure truly safe and pleasant workplaces.

Maintaining and Improving the Safety and Comfort of Workplace Environments

NGK is constantly striving to eliminate work-related accidents. To this end, NGK implemented OSHMS as a mechanism for systematic and ongoing safety and health initiatives in fiscal 2007. Since then, NGK has worked extensively to embed and operate this system.

Major themes governing our fiscal 2010 activities included patrols conducted at each worksite and the prevention of workplace accidents through risk assessment.

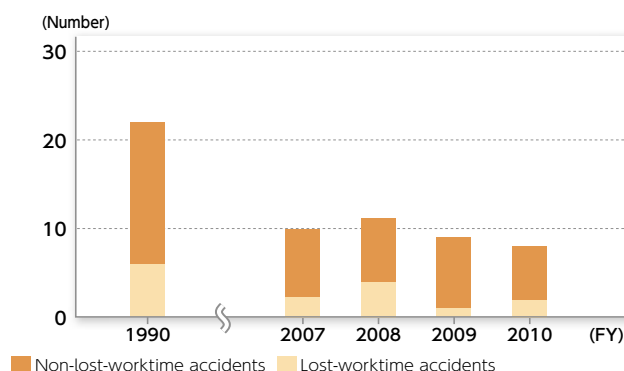
The main thrust behind worksite patrol initiatives in this fiscal year was to improve the consistency across different worksites of health and safety standards governing patrols, and thereby improve overall standards across the Group. Steps taken to prevent workplace accidents centered on the use of risk assessment in reducing potential risk and enhancing the level of safety.

Domestic Group companies ensure compliance with laws regarding occupational health and safety at the same time as taking steps commensurate with each workplace to further improve the level of safety and comfort.

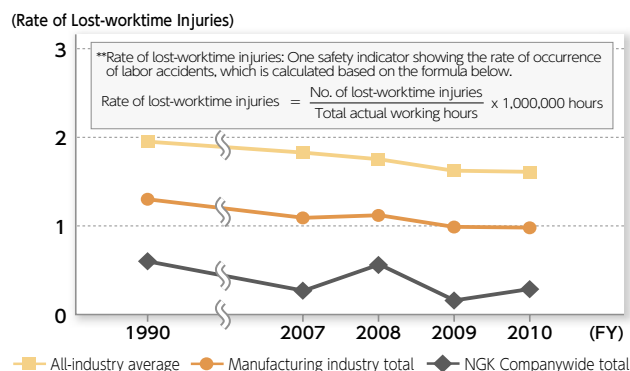
In fiscal 2011, NGK intends to implement further improvements to occupational safety and health. Workplace patrols will be carried out at each worksite on a voluntary basis to enhance the ability to identify issues for improving occupational health and safety. We will

also look to enhance risk assessment and strive to avoid omissions or shortfalls in our evaluation of latent risk in work performed. In addition, we intend to renew the outside certification for OSHMS at the Nagoya Site.

Changes in Work-related Accidents



Changes in Rate of Lost-worktime Injuries**



Safety chorus at Company-wide Safety and Health Committee (March 2011)

* OSHMS: These are safety and health management systems that aim to contribute to a rise in the level of safety and health at factories and offices by endeavoring to reduce the potential risk of labor accidents, promote the health of workers, and encourage the formation of a comfortable workplace environment.

Expanding Safety and Health Education

NGK has reinforced efforts to raise awareness of occupational health and safety among employees in a push to enhance levels of health and safety.

In fiscal 2010, NGK held an experiential safety education program attended by approximately 250 people, including all new hires and young employees, to promote a firsthand understanding of the importance of safety in the workplace. New hires also underwent a test

of their driving aptitude in order to raise their awareness of traffic safety. In fiscal 2011, the experiential safety education program will be held for all new hires.

Domestic Group companies will continue to expand safety and health education tailored to the existing level of awareness at each company.

With Our Shareholders and Investors

The NGK Group is meeting the expectations of shareholders and investors by leveraging proprietary technologies to develop global operations that contribute to society and the environment.

Investor Relations Activities

The NGK Group promotes shareholder-oriented management that emphasizes capital efficiency across the entire Group, and strives to improve corporate value with the goal of realizing sustainable growth.

Furthermore, along with timely and accurate disclosure of corporate data through a variety of mediums, including via the corporate website, business reports

and annual reports, the NGK Group strives for two-way communication that allows it to gain invaluable input from its shareholders and investors.

In fiscal 2011, plans are on hand to disclose more information on the corporate website to promote even greater understanding of the NGK Group.

Aiming for a More Open General Meeting of Shareholders

NGK endeavors to hold open shareholder meetings that its shareholders will feel welcome in attending. In fiscal 2010, we used visual displays at the general meeting of shareholders and other venues to introduce visitors to NGK's corporate activities, including its social contributions, as well as current developments at the Company.



Product displays at the General Meeting of Shareholders (June 2011)

Investor Briefings on Financial Results

Investor briefings on financial results are held twice a year in Japan, primarily for the benefit of institutional investors and analysts. NGK also makes individual visits to institu-

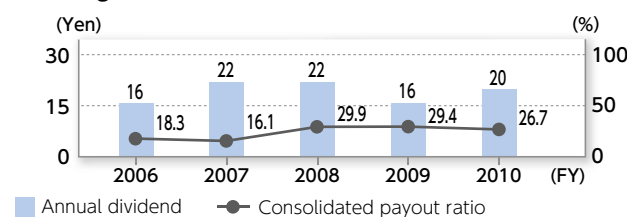
tional investors and responds to interview requests in Japan and in other countries in addition to issuing management information relating to corporate value.

Measures for Returning Profits to Shareholders

NGK views the return of profits to shareholders as one of its most important management policies.

As a basic policy, we strive for shareholder-oriented management that emphasizes return on equity (ROE), and distribute the benefits of successful management after consideration of a comprehensive range of factors, including business performance and financial position, and future business development. In fiscal 2010, we paid an annual dividend of ¥20 per share, with a consolidated payout ratio of 26.7%.

Change in Shareholder Dividends



Shareholders Information

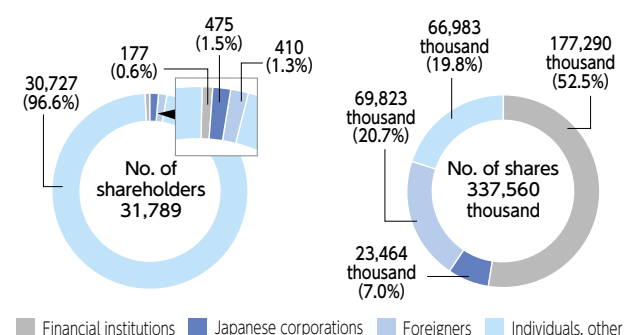
Status of Shares (as of March 31, 2011)

Total number of shares authorized:	735,030 thousand
Total number of shares issued:	337,560 thousand
Number of shareholders:	31,789

In recent years, we have upgraded and expanded the IR information available on our website in response to requests by shareholders and investors.

Web <http://www.ngk.co.jp/english/ir/>

Share Distribution (as of March 31, 2011)



With Our Suppliers

The NGK Group is determined to work as one with suppliers to enhance mutual competitiveness, while ensuring strict legal and regulatory compliance and pursuing procurement from a CSR perspective.

Initiatives Related to Suppliers

Together with the supplier companies that constitute our supply chain, we are actively working to ensure thorough legal compliance, to disclose information, and to promote green procurement,

as well as CSR procurement. In these activities NGK is guided by a basic policy centered on three principles: "Open and Fair," "Partnership," and "Relationship with Society."

Fair, Free and Transparent Procurement Activities

In procurement activities the NGK Group endeavors to comply with laws and ordinances related to procurement (including laws and regulations relating to export control and those relating to environmental conservation) and to maintain the social environment and social order.

NGK signs a Memorandum of Understanding with every supplier under which each company pledges not to do business with antisocial forces or organizations. In addition,

our efforts also include rigorous steps to ensure fair business practices through compliance with the Act Against Delay in Payment of Subcontract Proceeds, Etc. to Subcontractors. Furthermore, we are raising the level of transparency and fairness in procurement, including through the establishment of a helpline specifically for suppliers that is strictly operated in coordination with NGK's Compliance Department.

Extension of the Green Supplier Certification System Overseas

The NGK Group is promoting the green supplier certification system as an initiative capable of reducing environmental load across the entire supply chain.

In fiscal 2010, certification was obtained by roughly 90% of suppliers targeted for certification. NGK paid individual visits to and held presentations for suppliers that did not meet certification standards, and offered instructions on how to meet standards in an effort to raise the certification rate. NGK is aiming for 100% green supplier certification among suppliers targeted for certification in fiscal 2011.

NGK has started to extend this system to its Group companies in Japan and overseas. In fiscal 2010, a series of visits were made to Group companies to explain the

system and make preparations for its introduction, preparations which are now complete.

Another preparatory measure was the release, in March 2011, of the revised version of the "NGK Group's Green Procurement Guideline" (available in both English and Japanese) on our website.

In fiscal 2011 we will begin green procurement certification for major suppliers of Group companies worldwide.



Introduction and Promotion of CSR Procurement

In response to growing interest in CSR procurement both within and outside of Japan, NGK formulated the "NGK Group's Supply-Chain CSR Guidelines" in March 2011 and made it available on the corporate website. The scope of this document, available in both English and Japanese, covers all manufacturing subsidiaries in the NGK Group.

In fiscal 2011, we will use the results of a survey conducted among the major suppliers of NGK and its

Group companies to assess the actual status of CSR initiatives across the Group's entire supply chain. We will then introduce the CSR procurement system, bearing in mind the specific situations at each company and in each country.



Communication with Suppliers

We held an earnings results presentation for our major suppliers in May 2011. At this meeting we also sought to encourage greater understanding of our green and CSR procurement efforts. Similarly, the meeting provided an excellent opportunity to exchange viewpoints directly with suppliers.

Earnings results presentation for suppliers (held in May 2011)



With Society

As it expands its business activities worldwide, the NGK Group also conducts a wide variety of activities as a corporate citizen in the communities in which it does business.

Social Contributions and Initiatives With Communities

The NGK Group works to promote social contribution activities in partnership with local communities, aligned with the needs and characteristics of the communities in which each of our companies is

located. These activities center around people and education, environmental preservation, and community involvement. Our goal is to become a trusted corporate citizen in each of those communities.

Social Contribution Activities

In fields related to people and education, the NGK Group develops activities centered on supporting foreign students studying in Japan, with the goal of helping develop human resources who will contribute to the development of international society. In fiscal 2010, students receiving



Foreign students help clean up the local community (May 2010)

assistance actively participated in community clean-up programs. In addition, these students took part in cross-cultural exchange meetings, which have become an established forum for these students to interact with locals, and continued to offer foreign language classes.

In fields related to environmental preservation, NGK visited local elementary schools to give classes on the theme of water, and conducted other wide-ranging activities. Examples included purchasing green power, and participating in the Lights Down Campaign for reducing CO₂ emissions.

In fields related to community involvement, NGK holds a summer festival to which local residents are invited, as well as sponsors and supports sports festivals and participates in local clean-up campaigns, among other activities.

Supporting Employee-Based Activities

NGK works to create an environment in which employees can participate in and experience volunteer activities.

Table for Two Program

NGK employees have been taking part in the "Table for Two" (TFT) program since September 2010. Under this program, employees can choose from a menu of items at staff cafeterias that will help to improve their health, with ¥20 from each meal donated to provide a meal for a child in Africa. In fiscal 2010, the equivalent of approximately 6,800 meals were donated in the half year the program ran. Since this program was introduced, NGK has used various means such as the in-house newsletter, promotional videos and photo exhibitions to elicit employee understanding of TFT. Various



TFT Menu (Healthy Box)



Atsuta Cafeteria, Headquarters (September 2010)

activities are planned to entrench and stimulate participation in this program, including staging a food tasting event at which employees can try the meals they help provide for African children.



Mizuho Cafeteria, Headquarters (October 2010)

Introducing OISCA-International

In August 2010, NGK began providing information over its intranet about events and volunteer programs staged by OISCA-International, a public interest incorporated foundation that conducts a broad range of activities in Japan and overseas, including developing farming communities and preserving the environment. In fiscal 2010, approximately 30 projects were introduced to employees, including a volunteer tree-planting program and an event related to COP10, the 10th meeting of the Conference of the Parties to the Convention on Biological Diversity. One of these projects saw actual involvement by NGK employees. While continuing to provide information, NGK will create opportunities for employees to participate in and experience activities by gauging their needs in this area.

The NGK Group Social Contribution Activity Report is made available on our website.

[Web http://www.ngk.co.jp/english/csr/](http://www.ngk.co.jp/english/csr/)

Examples of Social Contribution Activities

Cleaning Up the Colonies of Skunk Cabbages at Abashiri Lakeside (NGK Okhotsk, Ltd.)



In November 2010, nine employee volunteers from NGK Okhotsk (Abashiri, Hokkaido Prefecture) took part in an activity run by the Lake Abashiri, Mizu to Midori no Kai to enhance and clean up the colonies of skunk cabbages at Abashiri Lakeside. Along with other volunteers, the employees collected and laid out dead branches and grass so that water would pool inside the colonies, and also picked up rubbish.

Weeding Along an Elementary School Route (Ikebukuro Horo Kogyo Co., Ltd.)



Employees of Ikebukuro Horo Kogyo (Tokorozawa, Saitama Prefecture) cleared weeds from beside a school route used by elementary school students in September 2010. To make the path safer, weeds are cleared at the end of the summer holidays every year because they become overgrown and encroach on the path. Volunteers weeded an approximate 100-meter stretch of pathway this year, filling bags with around 50 kilograms of weeds.

Kitchen-hand Trainees Welcomed at Staff Cafeteria (NGK Yu-Service Co., Ltd.)



In September 2010, NGK Yu-Service Co., Ltd. (Mizuho, Nagoya), which runs the NGK staff cafeteria, accepted trainee kitchen hands from Aichi Mizuho Junior College. The students, who are majoring in diet and nutrition, must undertake practical training away from the college as part of their course. For a period of one week, they gained hands-on experience preparing meals in the staff cafeteria.

Bicycle Class for Children (Energy Support Corporation)



Energy Support (Inuyama, Aichi Prefecture) in October 2010 held a bicycle class for local kindergartners and schoolchildren together with two neighboring companies. With the help also of Honda Motor Co., Ltd. and the Inuyama Police, Energy Support instructed 21 children on how to inspect and adjust their bicycles and to ride safely at intersections, among other advice.

Removing Volcanic Ash From Mt. Shinmoe (Soshin Electric Co., Ltd.)



In February 2011, 45 employees of Soshin Electric (Minato-ku, Tokyo) group companies Soshin Powertech Co., Ltd. (Miyakonojo, Miyazaki Prefecture) and Soshin Device Co., Ltd. (Miyazaki, Miyazaki Prefecture) cleared around 1 cm of volcanic ash from the eruption of Mount Shinmoe from the roads around company premises to stop it from being blown around by the wind. The employees removed some 30 tons of volcanic ash.

Donations to Local NPOs (NGK Ceramics South Africa (Pty) Ltd.)



NGK Ceramics South Africa donated 100,000 rand (approximately ¥1.16 million) to 2 NPOs that are providing instruction on organic farming, and conducting healthcare and educational activities, respectively, in South Africa with the goal of helping local residents achieve greater independence. The donations were made at a ceremony held in October 2010 to commemorate the company's 10th anniversary.

Response to the Great East Japan Earthquake

NGK wishes to offer its sincere sympathies to those affected by the Great East Japan Earthquake that struck on March 11, 2011. NGK hopes that the disaster-hit regions are able to achieve a swift recovery.

Fortunately, no NGK Group employees were killed or injured in the natural disaster, and our production lines were not badly affected. In the wake of the earthquake and tsunami, the NGK Group worked cohesively to produce and supply insulators and other products to help restore power facilities, an important lifeline. Furthermore, in order to provide relief to those affected and help with restoration efforts in the disaster-stricken areas, the NGK Group made a monetary donation of approximately ¥100 million through the Japanese Red Cross Society.

Summer Power-Saving Initiatives

NGK initiated a number of measures to reduce electricity consumption on weekdays during the 2011 summer in Japan. These included changing company non-work days during the three-month period from July through September, and introducing NAS (sodium-sulfur) batteries.

1. Measures to Maximize Power Reductions on Weekdays

Production divisions will operate on Saturdays and Sundays from July 1 through September 30, shifting days off to Tuesdays and Wednesdays. Production divisions also took summer holidays for nine straight days from August 2 to August 10. Schedules for summer vacations other than the above were set by each production division.

2. Reducing Peak Electricity Consumption Using NAS Batteries

By introducing NAS batteries at the Nagoya Site (Mizuho, Nagoya), the Chita Site (Handa, Aichi Prefecture) and the Komaki Site (Komaki, Aichi Prefecture), NGK plans to increase its own electrical storage capacity to 8,000 kW in total, including existing capacity. Capable of storing large amounts of electricity, these batteries are charged at night when electricity demand is low, and discharged during the day, thereby reducing peak electricity consumption.

3. Power-Saving Measures

NGK has implemented a range of measures to save power, including suspending the use of some elevators, removing lights, setting air-conditioning at 28 degrees Celsius, adjusting brightness on PCs and other electronic displays, turning off PCs during breaks and when away from desks. NGK also began encouraging employees to wear light summer business attire from May 16, two weeks earlier than normal.



NAS batteries at the Nagoya Site

With Our Environment

In order to contribute to the realization of a sustainable society, the NGK Group is working to reduce its environmental load around the world.

Highlight

Steady Results Mark Completion of Second Five-Year Environmental Action Plan

Summary of the Second Five-Year Environmental Action Plan (FY2006–FY2010)

Launched in fiscal 2006, the Second Five-Year Environmental Action Plan oversaw efforts to develop consolidated environmental management that included overseas Group companies, as well as promotion of reductions in environmental load and an emphasis on environment-related compliance. Ultimately, we achieved our targets

for 10 of the action plan's 11 items, with the exception of our target for reducing CO₂ emissions.

In line with the conclusion of the second action plan, we formulated the Third Five-Year Environmental Action Plan, which contains new environmental activities that the NGK Group will conduct from fiscal 2011 to fiscal 2015.

Category		Targets for FY2006–FY2010	Achievement	Self-Evaluation
Management	Environmental management	•Environmental CSR activities Introduce environmental management indicators (CO ₂ , by-products, environmental efficiency, third-party audits, environmental ratings, etc.)	•Implement third-party audits of environmental data •Waste/recycling governance rating certification and registration	○
		•Promote consolidated environmental management •Promote integration of environmental management data	•Develop and embed operation of a consolidated environmental management system Begin managing load-reduction targets for overseas Group companies •Introduce and operate integrated system for managing environmental data	○
Factories	Environmental load	•Curb CO ₂ emissions NGK: 7% reduction from FY1990 Domestic consolidated: Basic unit per net sales 7% reduction from FY2005	•Curb CO ₂ emissions NGK: 4% reduction from FY1990 Domestic consolidated: Basic unit per net sales 3% reduction from FY2005	×
		•Curb volume of by-products generated NGK: 25% reduction from FY2005 Domestic Group: 15% reduction from FY2005	•Curb volume of by-products generated NGK: 40% reduction from FY2005 Domestic Group: 23% reduction from FY2005	○
		•Reduction of atmospheric emissions of PRTR solvents NGK: 10% reduction from FY2005 Domestic Group: 10% reduction from FY2005 •Promote better chemical substance management	•Reduction of atmospheric emissions of PRTR solvents NGK: 14% reduction from FY2005 Domestic Group: 33% reduction from FY2005 •Comply with REACH regulations, the revised PRTR ¹ Law, and amended CSDL ²	○
Products	Eco-conscious design	•Step up level of environmentally conscious design	•Promote reduction in environmental load through material flow analysis •Explore evaluation of product environmental contribution	○
	Green procurement and logistics	•Reduce the environmental impact of procurement	•Expanded use of the Green Procurement Guideline •Promote green supplier certification	○
		•Minimize emissions from logistics	•Promote a modal shift	○
Stakeholders	Social contribution	•Promote activities that benefit local communities	•Conduct cleanup activities around plant •Send employees to do on-site lectures	○
	Environmental communication	•Enhance disclosure and two-way communications	•Disclose environmental data via the CSR Report and on the website •Take part in the Environmental Partnership Organizing Club (EPOC)	○
	Education and awareness-raising	•Enhance environmental education	•Conduct position-based training and environmental lectures •Promote acquisition of Certification Test for Environmental Specialists ³ (Eco Test)	○

Notes: 1. PRTR Law: Pollutant Release and Transfer Register

2. CSDL: Chemical Substances Control Law

3. Evaluation standards for achievement level:

○ Target achieved

△ 80% or more of target achieved

×

Visit the website for more details regarding the Second Five-Year Environmental Action Plan.

[Web http://www.ngk.co.jp/english/csr/](http://www.ngk.co.jp/english/csr/)

Visit our website for environmental activity reports from each business site and other detailed information.

Web <http://www.ngk.co.jp/english/csr/>

● Main Achievements

Based on the Second Five-Year Environmental Plan, we developed a consolidated environmental management system that includes overseas Group companies, and embarked on efforts to reduce their environmental load. Overseas Group companies pursued a variety of initiatives in this area. NGK Insulators Tangshan, for example, converted to a different boiler fuel to reduce CO₂ emissions, while NGK Ceramics Europe (Belgium) reduced by-products through process improvements.

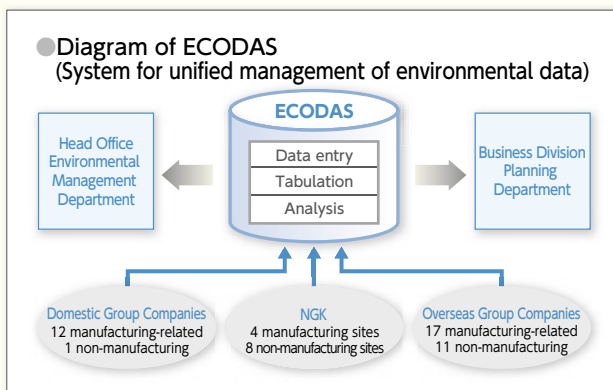
At the same time, we moved to strengthen initiatives around environmental protection and reductions in environmental load. One key action was the development of a unified database, ECODAS, which provides integrated

management of data on CO₂ emissions and other environmental measurements, as a means of promoting solid, efficient environmental management throughout the NGK Group.

As a result of these steps, CO₂ levels were reduced by a cumulative 43,000 tons and by-products by a cumulative 5,200 tons between fiscal 2006 and fiscal 2010 on a domestic consolidated basis.

Activities conducted as part of contributions to local communities included cleanup programs around NGK plants and lectures given to elementary schools by employees. Employee environmental training, meanwhile, included lectures and a drive to encourage employees to take the Eco Test. Furthermore, with the naming of NGK Group chairman Shun Matsushita as chairman of EPOC, a group consisting of major companies in Japan's Chubu region, we focused on intercompany environmental communication through EPOC activities.

* See pages 36 and 37 for more details regarding reductions in environmental load.



Environmental lecture
 (March 2011)

Converting fuel to reduce CO₂ (NGK Insulators Tangshan)

NGK Insulators Tangshan (China) began transitioning away from heavy oil to natural gas for boiler fuel to do its part to help prevent global warming. The company completed the conversion of half of its boilers over to natural gas in fiscal 2010, cutting CO₂ emissions by 2,300 tons per year. The conversion to natural gas will continue to move forward, with the fuel conversion for the remaining boilers scheduled for completion in fiscal 2012.



Reduction of by-products through manufacturing process improvements (NGK Ceramics Europe)

NGK Ceramics Europe (Belgium) has long worked to curb the generation of by-products from the manufacture of HONEYCERAM ceramic honeycomb substrates for automotive catalytic converters. In fiscal 2010, the company cut by-products by 480 tons by boosting yields through process improvements and through more efficient kiln loading.



Third Five-Year Environmental Action Plan

History of the NGK Group's Five-Year Environmental Action Plans

Since fiscal 2001, the NGK Group has promoted environmental initiatives based on the formulation of Five-Year Environmental Action Plans.

The First Five-Year Environmental Action Plan (fiscal 2001 to fiscal 2005) saw NGK pursue reductions on a non-consolidated basis in CO₂ and the volume of by-products sent to landfill. All domestic Group companies also obtained third-party certification of their environmental management systems.

Under the Second Five-Year Environmental Action Plan (fiscal 2006 to fiscal 2010), we established and took steps to meet reduction targets for CO₂ and by-products, including among domestic Group companies. We also developed consolidated environmental management that covers overseas Group companies, and obtained ISO 14001 certification for 16 of 17 overseas Group companies.

Overview of the Third Five-Year Environmental Action Plan (fiscal 2011 to fiscal 2015)

Under the Third Five-Year Environmental Action Plan, we will seek to reduce the environmental load posed by the NGK Group worldwide.

In a drive to reduce our environmental load on a global scale, we set reduction targets for CO₂ and emissions* that also include new production activities enacted by overseas Group companies. Along with adding the emission recycling rate as an environmental management item, we are pushing greater recycling efforts forward. Another initiative is effective use of water

resources, where we are establishing standards for gauging effective usage. Furthermore, along with making strides in the provision of Eco Products, we are drafting standards for quantifying the environmental contribution of our products. Through these actions, the NGK Group will contribute to the creation of a low-carbon society, a recycling-oriented society, and social harmony with nature.

Key elements of the Third Five-Year Environmental Action Plan are described below.

Category	Item	Management item	FY2015 target
Global warming prevention	Reduction of CO ₂ from production activities	Domestic CO ₂ emissions	10% reduction from FY1990
		Domestic basic unit per net sales	20% reduction from FY2010
		Overseas basic unit per net sales	5% reduction from FY2010
	Reduction of CO ₂ from logistics	NGK basic unit per transport volume	1% reduction each year
Effective use of resources	Emission* reduction	Domestic basic unit per net sales	10% reduction from FY2010
		Overseas basic unit per net sales	5% reduction from FY2010
	Promotion of resource recycling	Domestic recycling rate	Recycling rate of over 99%
		Overseas recycling rate	Establish and embed management of recycling rates that reflect achievement level in each country
	Effective use of water resources	Progress rate of plan	Use surveys of water resource use to develop standards for more effective usage
Ensuring chemical substances management	Improvement in management level for chemical substances	Progress rate of plan	Upgrade and operate a chemical substance management system
Provision of Eco products	Promotion of environmental contribution through products	Progress rate of plan	Formulate standards for quantifying the environmental contribution level of products
	Promotion of green procurement		Complete green supplier certification
Promotion of environmental communication	Robust environmental contribution activities	Progress rate of plan	Continue and enhance activities in partnership with local communities
	Improvement in environmental awareness		Continue and enhance environmental training and information disclosure

* From fiscal 2011, items previously labeled as by-products will be labeled as emissions.

Environmental Management

NGK's Core Policy on the Environment

Recognizing that protecting the environment is a vital issue that all of humanity must face, the NGK Group formulated its Core Policy on the Environment in April 1996 in order to bring its corporate activities into harmony with the environment. On the basis of this policy, we work to reduce the environmental impact of business activities, and actively strive to help protect the

environment by developing products and technologies to that end.

Visit the website for more details regarding NGK's Environmental Philosophy and Environmental Action Guidelines.

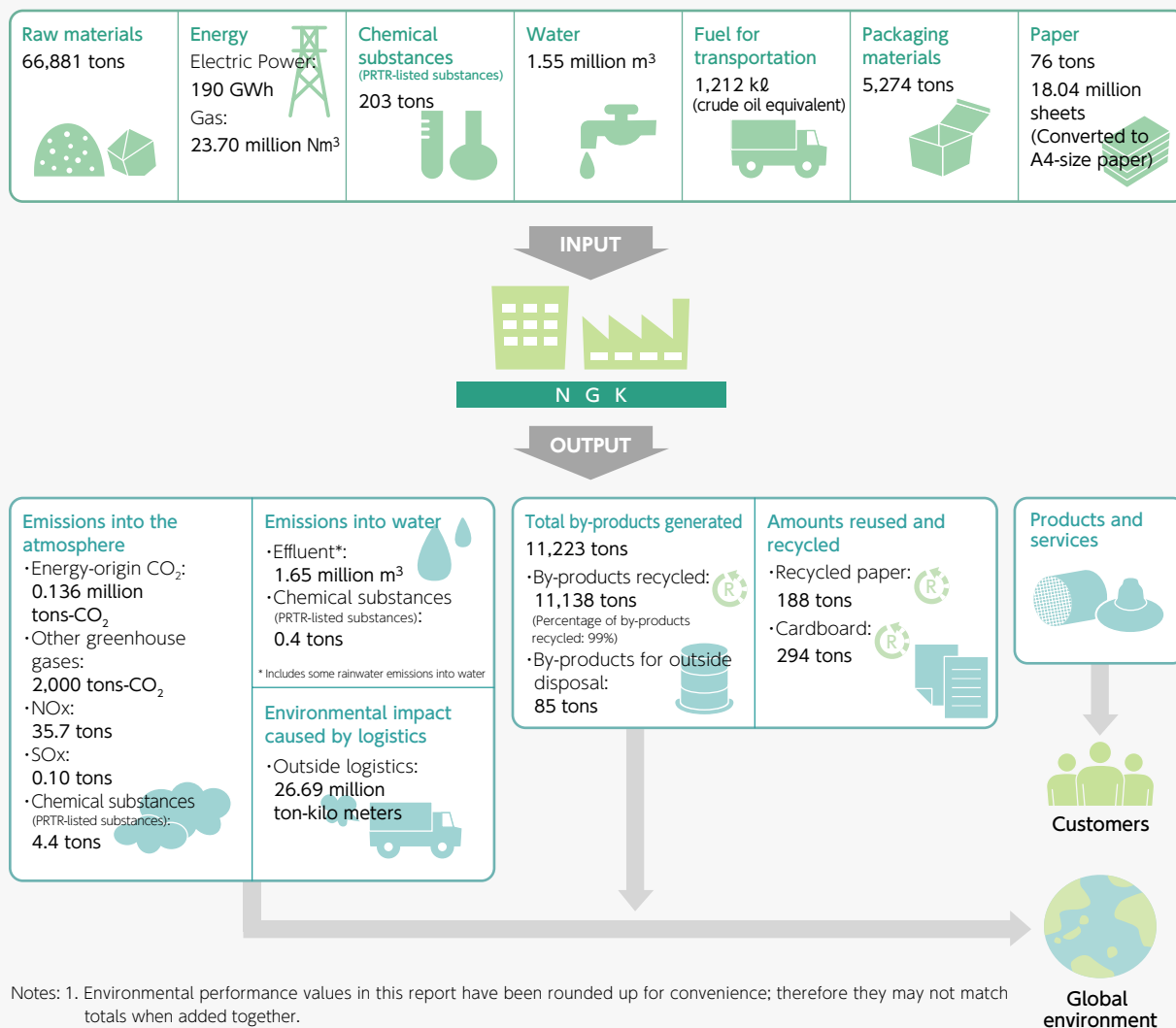
Web <http://www.ngk.co.jp/english/csr/>

Overall Perspective of Environmental Impact

The diagram below shows inputs and outputs in business activities conducted by NGK. It shows inputs of raw material and energy and outputs in the form of manufactured products and services, as well as substances that are discharged into the atmosphere and into water.

In fiscal 2010, resource and energy input volume, as well as the output volume of substances impacting the environment, were higher versus fiscal 2009. This growth primarily reflected increased production volume for automotive ceramic products.

Inputs and Outputs of NGK's Three Plants



Initiatives to Reduce Environmental Load

The NGK Group's priority issues are to curb CO₂ emissions, curb generation of by-products, and curb emissions of chemical substances. We are continuing our initiatives to reduce environmental load in our business activities.

From fiscal 2011, we will also establish targets for overseas Group companies to promote reductions in environmental load on a global scale.

Curbing CO₂ Emissions

CO₂ Emissions

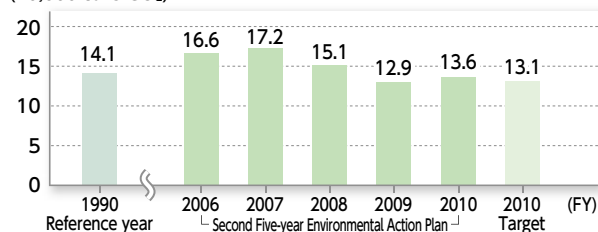
NGK's total energy-origin CO₂ emissions*¹ in fiscal 2010 amounted to 136,000 tons, a 4% decrease compared to fiscal 1990 but higher than the 131,000 tons targeted (7% decrease from fiscal 1990). The main reason for this shortfall was increased production volume.

In terms of basic unit per net sales*² on a domestic

consolidated basis, emissions in fiscal 2010 declined to 97, down 3 points from the reference year of fiscal 2005 but short of the target of 93 for the year. This outcome was mainly the result of a decline in sales of products with superior performance in terms of basic unit per net sales.

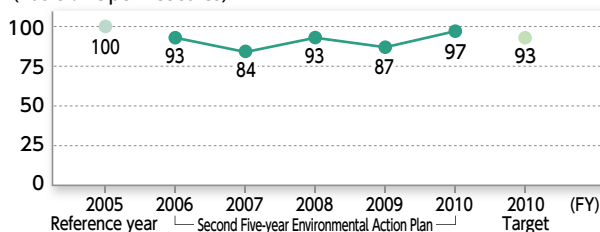
● CO₂ emissions (NGK)

(10,000 tons-CO₂)



● CO₂ emissions per net sales (Domestic Consolidated)

(Basic unit per net sales)



*² Basic unit per net sales: Presented as an index with fiscal 2005 as 100.

Initiatives to Curb CO₂ Emission Volumes

NGK has continued to improve productivity, recover waste heat, and introduce highly efficient equipment as part of efforts to reduce CO₂ emissions. Reductions in CO₂ are also moving forward atop a push for structural innovation in manufacturing initiated in fiscal 2009. In addition to these actions over the years, fiscal 2010 saw NGK turn attention to reducing CO₂ emissions from general-purpose equipment, culminating in the compiling of an energy-saving check sheet for compressors and energy-saving guidelines.

Group initiatives are also being reinforced, including the holding of meetings in conjunction with domestic Group companies to showcase examples of energy

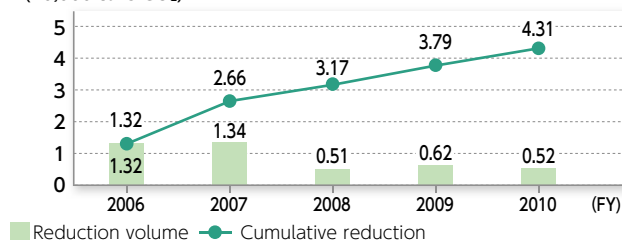
saving at work. All told, these efforts resulted in a 5,000-ton reduction in CO₂ emissions on a domestic consolidated basis in fiscal 2010, and a cumulative reduction of 43,000 tons from fiscal 2006 to fiscal 2010.

Going forward, we will look to cut CO₂ emissions further through ongoing structural innovation in manufacturing and the development of innovative energy-saving technologies. We will also promote similar reductions globally through the horizontal rollout of reduction examples from Japan among overseas Group companies.

Furthermore, NGK has seen CO₂-reduction initiatives at NGK Ceramics Indonesia, a Group company involved in manufacturing, approved and registered (1,400 tons per year) as a Clean Development Mechanism (CDM) by the United Nations CDM Executive Board. NGK is aiming to obtain CDM approval of the same technology to reduce CO₂ emissions at NGK Ceramics Mexico.

● Reduction of CO₂ emissions (Domestic Consolidated)

(10,000 tons-CO₂)



NGK Ceramics Indonesia

*¹ CO₂ conversion factors (kg-CO₂/unit) used in calculating CO₂ emissions are as follows: Units are indicated in parentheses. Purchased electric power (kWh): 0.42 Fuel oil (L): 2.677 Diesel fuel (L): 2.64 Kerosene (L): 2.49 City gas (Nm³): 2.347 LPG (kg): 3.007 LNG (kg): 2.70 Gasoline (L): 2.322 Sources: Federation of Electric Power Companies of Japan (fiscal 1990 actual figures), Ministry of the Environment. Some factors have been calculated independently by NGK. However, fiscal 2010 energy-origin CO₂ emission volume for NGK on a non-consolidated basis is 145,000 tons when using the CO₂ conversion factor provided by the Cabinet Orders of the Law Concerning the Promotion of Measures to Cope with Global Warming (revised in March 2010).

Curbing By-products Generated

Changes in By-products Generated

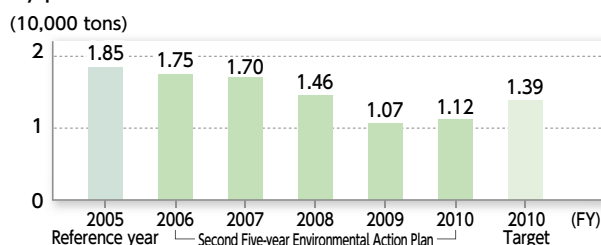
The NGK Group works continuously to conserve and recycle resources, promoting reductions in by-products generated by encouraging reuse in processes, boosting yields, and improving production processes.

In fiscal 2010, total by-products generated by NGK amounted to 11,200 tons, a reduction of 40% compared to fiscal 2005, and better than the 13,900 tons targeted

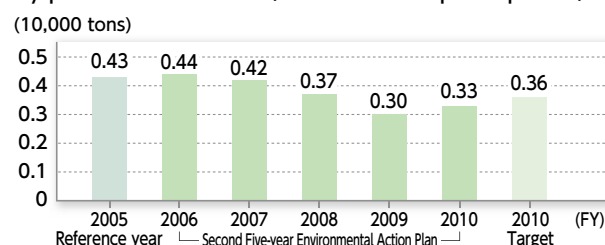
for the year (25% reduction versus fiscal 2005).

By-products generated by domestic Group companies in fiscal 2010 were 3,300 tons, down 23% compared to fiscal 2005 and meeting the target of 3,600 tons (15% reduction versus fiscal 2005).

● By-product Generation (NGK)*3



● By-product Generation (Domestic Group companies)



Curbing By-products and Encouraging Recycling of Resources

In fiscal 2010, domestic consolidated subsidiaries cut by-products by 970 tons, which included a reduction of 210 tons from improvements to production processes for ceramic products at the Nagoya Plant. On a domestic consolidated basis by-products have been reduced by a cumulative 5,200 tons from fiscal 2006 to fiscal 2010.

NGK has encouraged the recycling of by-products as resources through extensive sorting and the search for new recycling methods. In fiscal 2010, we reduced the

outside disposal of by-products to 85 tons, reflecting the spread of treatment methods through the sharing of recycling information between NGK plants. Consequently, NGK's recycling rate rose to 99%.

In addition to raising the quality of resource recycling, we will promote improvements in the recycling rate among NGK domestic Group companies.

Curbing Emissions of Chemical Substances

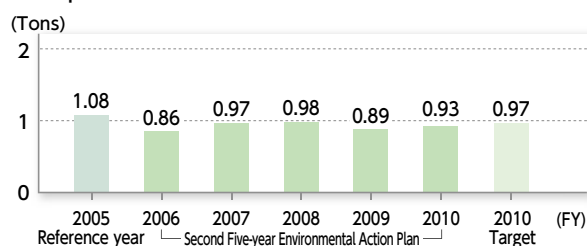
Change in Atmospheric Release of PRTR*4-listed Solvents, and Initiatives to Curb Emissions

With respect to the atmospheric release of PRTR-listed solvents, NGK has long taken steps to reduce its use of such substances and switch over to viable alternatives. As a result, in fiscal 2010, the atmospheric release of PRTR-listed solvents at NGK was 0.93 tons (down 14% compared to fiscal 2005), meeting the target of 0.97 tons (10% reduction from fiscal 2005) for the year. The atmospheric release of such substances by domestic

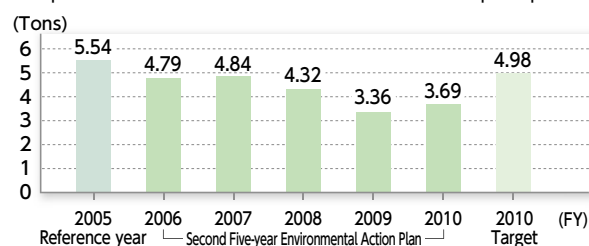
Group companies was 3.69 tons (down 33% compared to fiscal 2005), beating the target for the year of 4.98 tons (10% reduction from fiscal 2005).

NGK remains committed to improving its level of management with respect to chemical substances.

● Atmospheric Release of PRTR-listed Solvents (NGK)



● Atmospheric Release of PRTR-listed Solvents (Domestic Group companies)



*3 Fiscal 2008 data have been corrected due to an earlier omission during compilation.

*4 PRTR: A framework for understanding the volume of hazardous chemical substances released into the environment, and the volume of waste transported.

Stakeholder Dialogue

The NGK Group is expanding lines of communication with its various stakeholders while pursuing CSR initiatives in partnership with them.

Dialogue with Employees CSR Talk Live Sessions

Since the fall of 2009, the NGK Group has held live CSR discussion events between employees and senior management. These CSR Talk Live sessions are staged with the goal of ensuring that each and every employee understands and gains a deeper awareness of our CSR initiatives, and our vision for CSR.

Eleven sessions held in fiscal 2010, with lively questions and opinions offered by employees.

CSR Talk Live sessions are an opportunity for the Company and a key stakeholder group, its employees, to directly discuss CSR initiatives and interact. In fiscal 2010, 479 people took part in the events, or roughly 10% of the Group's workforce in Japan. At each venue, President Taro Kato (then Executive Vice President) and CSR Committee Chairman and Director Mitsuo Ibuki, focusing on the theme of CSR initiatives taken by the NGK Group, highlighted the importance of CSR. Meanwhile, the Environmental Management Department and CSR Promotion Office offered explanations of specific case studies from the CSR Report 2010.

Questions and opinions from attendees covered a host of topics, including NGK Group CSR activities, its approach to the active utilization of women and hiring of foreign nationals, and ways of practically reflecting the opinions expressed in CSR Talk Live. Amid this

interchange of opinions, those present gave consideration to the kinds of actions that employees and the Company should strive for together.

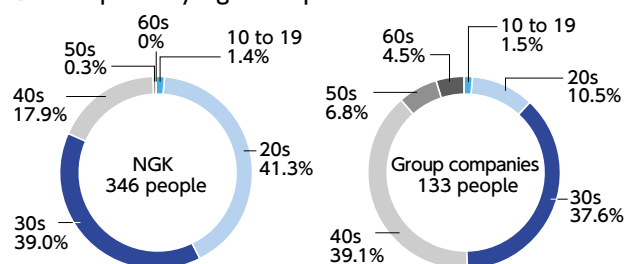


President Taro Kato
(Executive Vice President when sessions were held)



CSR Committee Chairman and Director Mitsuo Ibuki

Participants by Age Group



Rating the Management's Explanations (Total participants each time)

"NGK Group CSR Initiatives"		Explanation of CSR Report	
Explanation was very clear	115	Explanation was very clear	88
Explanation was sufficient	237	Explanation was sufficient	258
Explanation was unclear	9	Explanation was unclear	13

Rating of Time Spent (Total participants each time)

Too long	Just right	Too short
21	300	38

CSR Talk Live Sessions Held Everywhere to Entrench Understanding of CSR

<Aichi>

- Headquarters/Nagoya Site — Sept. 16 (47 people)
Sept. 27 (52 people)
Oct. 4 (50 people)
Oct. 7 (59 people)

- NGK Yu-Service Co., Ltd. — Oct. 14 (44 people)
- NGK Logistics, Ltd. — Oct. 14 (44 people)
- NGK Building Services, Ltd. — Oct. 14 (44 people)
- NGK Fine Molds, Ltd. — Nov. 15 (29 people)
- Komaki Site — Oct. 20 (52 people)
- Chita Site — Sept. 21 (50 people)

<Tokyo>

- Tokyo Main Office — Oct. 22 (36 people)

<Kanagawa>

- NGK Filtech, Ltd. — Oct. 29 (25 people)

<Saitama>

- Ikebukuro Horo Kogyo Co., Ltd. — Nov. 11 (35 people)

Nagoya Site

■ In looking at "CSR Objectives and Achievements," who determines the level of target achievement for the year and how is this done?
[Male employee, joined in 1986]

■ I vaguely knew that NGK conducts CSR activities, but participating in CSR Talk Live increased my understanding. Since it was a rare opportunity to communicate with top management, I felt it would have been nice to have a bit more time to exchange viewpoints with them.
[Male employee, joined in 1988]

■ How are you working to entrench CSR activities at overseas Group companies?
[Male employee, joined 1988]

■ I think NGK should showcase its CSR efforts a bit more.
[Male employee, joined 2007]

■ Are CO₂ emission reduction effects not considered when calculating

the economic viability of capital investments?
[Male employee, joined 2001]

■ For me, mention of CSR tends to conjure an image of something rather difficult to grasp. But management clarified CSR for me as "moving forward in doing something that you know is right to do." Getting the concepts in my head by reading the booklet alone is tough for me, but taking part in CSR Talk Live really gave me a better understanding of things. By all means, I hope that NGK continues to hold these sessions.
[Female employee, joined 2008]

■ I was unfamiliar with the term CSR. Because the NGK Group's CSR efforts aren't communicated well to those on the outside or to employees, I think embedding this knowledge among employees is a good thing. I learned that the Group is involved in a variety of social contribution activities.
[Female employee, joined 1998]

■ I think incorporating current problems that have emerged in-house and future objectives will make things more concrete.
[Male employee, joined 2004]



Chita Site Komaki Site Tokyo Main Office

■ Are there any CSR activities that the NGK Group is particularly focused on compared to other companies?
[Male employee, joined 1985]

■ I think having opportunities like this outside of regular training to deepen understanding of CSR is great. I am looking forward to what "CSR-Web" has to offer.
[Female employee, joined 1993]

■ Methods for sorting and separating trash differ based on the local governmental jurisdiction where a particular business site is located. Are you considering creating standards, including for Group companies, which will make these methods more consistent?
[Male employee, joined 1999]

■ My impression is that CSR Talk Live is a good way to reaffirm that CSR initiatives are the responsibility of all employees, not just management.
[Male employee, joined 1988]

■ The "5S" activities are not rigorously enacted at the Tokyo Main Office. How will these be implemented going forward?
[Female temp employee]

■ The topics discussed focused mainly on issues in and around the headquarters, but I would also like to know about any unique energy conservation or social contribution activities happening at sales bases and other sites.
[Female employee, joined 1980]



Group Companies

■ The information in the CSR Report was over my head, but I spent three hours reading through it. The thoughtful explanations given at CSR Talk Live helped me to better understand it. I am glad I chose to attend.
[Female employee, joined 1983]

■ I was reminded again of the steps NGK is taking to be a company that is considerate of both our society and the environment.
[Female employee, joined 1992]

■ I am not really clear on what NGK is trying to say with its current batch of TV commercials. Who are these ads for, and what message are they attempting to convey?
[Female contract employee]

■ I think that giving more specific examples of the fields that the NGK Group is most focused on, as well as the part that it hopes Group employees will play, will facilitate understanding and more decisive action.
[Male employee, joined 2009]

■ What steps should be taken to raise the level of worker awareness regarding safety?
[Male employee, joined 1992]

■ I suspect that most employees are usually not aware of themselves as part of a larger NGK Group. That's why I think that CSR Talk Live is a good opportunity to consider the meaning of being a group and related measures. Explanations were also broken down into smaller chunks, making things very easy to understand.
[Male employee, joined 2005]

■ What is the situation like in terms of hiring foreign nationals? Also, there are very few female managers. What changes do you expect in this area?
[Male employee, joined 1991]

■ Without an opportunity of this kind, I would probably never have properly read the CSR Report. I learned at length that our activities are connected to CSR in a variety of different ways.
[Male employee, joined 2003]



Third-party Opinion

Mr. Koichi Ikeda

Specially Appointed Professor,
Rikkyo University Graduate School of
Business Administration,
Visiting Professor, Ritsumeikan University
Management School



In reading through the NGK Group's CSR Report 2011, it is readily apparent that the Group's product lines are contributing greatly today to achieving a sustainable society, the basic theme underlying CSR, as well as to the environmental sustainability that will support it. It is also clear that those products have the potential to be enormously useful in this area. The feature section, "Eco Products and Eco Processes," is particularly coherent in presenting how the Group will continue contributing to society through products and technologies that protect the environment, a good example of which is HONEYC-ERAM ceramic substrates for automotive catalytic converters. From a CSR standpoint as well, it is not an overstatement to say that the Group's business domains are worthy areas of endeavor.

The specific status of CSR initiatives is reviewed each year in line with eight CSR promotion categories that include preservation of the natural environment. In the current report, a simple explanation of targets and achievement in fiscal 2010 is given for each category, and each is assigned a mark of achievement level, either a circle (achieved), triangle (partial achievement), or X (not achieved). Both the format and content of this section are extremely simple to understand. After this section, the report offers a discussion of the NGK Group's approach to initiatives and achievements across an array of fields from the standpoint of relationships with customers and other key stakeholders. What stands out most is that these sections, as in previous reports, remain easy to read and understand, with conscious effort clearly made to provide concrete figures and to keep graphs and diagrams simple and concise. Even with the variation in progress seen in the different categories, I am able to give these sections high ratings overall for displaying the solid and steady progress being made by the Group on initiatives in each respective field. It may go without saying, but when using a simple and intuitive

format like this, having the Company rate itself in the least flattering direction whenever discrepancies in achievement and achievement level exist, and offering brief reasons for why worse scores were given, is critical to gaining stronger trust from stakeholders. In an era like today filled with so much uncertainty, striving to continuously improve upon CSR promotion categories and targets while not being boxed in by them, then changing objectives when necessary and explaining the rationale for doing so in an intuitive way to stakeholders, will lead to greater credibility. This is an area where the NGK Group has been ahead of the curve.

In July 2011, the NGK Group completely revised its NGK Group Guidelines for Corporate Behavior to chart a course to realizing its corporate philosophy and promoting CSR. My sense is that this was a major step toward promoting "CSR in which all employees can take part" as mentioned in the Management's Commitment section of the report. In reviewing the composition and content of the guidelines to achieve greater penetration of CSR, actions to be taken as a company are now embodied in the NGK Group Guidelines for Corporate Behavior, while individual employees will take action under a new set of behavioral guidelines. This revision has resulted in guidelines that are more specific and easily understood. The direction that NGK as a company and individuals should take, as well as the content of actions to be taken, are structurally clearer now, and are posted on the NGK website. For employees, on whom responsibility for specific CSR action always rests, and for the range of other stakeholders in society, this guideline reboot will likely be a deeply meaningful one from which steady progress on CSR initiatives can be expected. I am very much looking forward to witnessing even greater achievements in CSR for the NGK Group in the years ahead.

Response from NGK

In the feature section of this year's report, we introduced just some of the products and technologies of the NGK Group from the perspective of their level of contribution to the environment and ability to reduce environmental load. NGK pursues the cutting-edge of technology. In meeting society's expectations and trust through products and services that help create a better social environment and deliver new value to society, we aim to realize sustainable growth and boost our corporate value.

This year's report marks the third time that we have reviewed "CSR Objectives and Achievements" in the report. We have positioned this particular initiative as a vital one for ensuring that PDCA cycles for CSR activities are firmly in place Group-wide, and hope to continue implementing it in the coming years. We will now take steps to develop even more objective and easy-to-follow ratings, explore options for publicizing those results, and move to enhance content further.

In July 2011, we revised the NGK Group Guidelines for Corporate Behavior. Along with promoting sincere and responsible behavior as a member of society, we intend to listen carefully to input from our stakeholders and respond proactively to changes in society and the new demands that emerge.



Mitsuo Ibuki

Director and Senior Vice
President
Chairman, CSR Committee



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Plate making:

For this report, plates were made by Computer To Plate (CTP) technology enabling the complete discontinuation of the use of sheets of intermediate materials during the page makeup process.

Printing:

Because a waterless method was employed for printing, alkaline developers and acid fixing solutions were not necessary for the plate development, and isopropyl alcohol or other types of dampening water were not necessary for the ink transfer printing.

Paper:

Printed on paper made with wood from forest thinning, "Morino Chonai-Kai" (Forest Neighborhood Association)—Supporting sound forest management.

Ink:

NGK has changed from using petroleum solvents to 100% use of mainly soy-based vegetable solvents. Inks used contain 1% or less volatile organic compounds (VOC).

Design:

We have taken care to select an easily readable font-size and attractive color layout, and to employ diagrams and tables to express information clearly.