

CSR Report 2012

NGK SPARK PLUG Group



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Publication Policy

This report has been prepared on the basis of our Information Disclosure Policy (p. 22) with the aim of providing reports in an easy-to-understand and friendly manner, focusing on ease of understanding, importance and completeness, and trustworthiness.

Preparation of CSR Report



Information Selection

This Report covers information that is considered important for NGK SPARK PLUG Group, as well as information that is considered important or useful for our stakeholders.

Consideration to Ease of Understanding

To ensure ease of understanding for its audience, the document is divided into sections of management, social and environmental reports. In the social report, information concerning each stakeholder is provided according to the category of stakeholders. In addition, each page is designed so as to clearly describe the concept, mechanism and results of our activities.

Consideration to Trustworthiness

We have worked to improve the trustworthiness of the document by undergoing third party examination to affirm the content correctness, neutrality and verifiability.

Information Disclosure on our websites

Places where you can look up more detailed information on our website are marked . Places where you can look up related information on our website are marked .

CSR Information

<http://www.ngkntk.co.jp/english/csr/index.html>

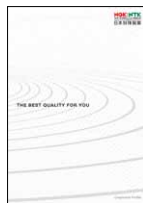
Reference guidelines

- Environmental Reporting guidelines (2007 version) issued by the Ministry of the Environment of Japan
- GRI Sustainability Reporting Guidelines (Version 3)
- ISO26000

Communication Tools

*Respective PDF files can be viewed on our websites.

Introduction of the NGK SPARK PLUG Group
Corporate brochure



Report on CSR activities
CSR Report
(Full and digest versions)



Financial information
• Annual Report
• To All Our Shareholders (Japanese only)



General information
<http://www.ngkntk.co.jp/english/index.html>



Information on spark plugs
<http://www.ngk-sparkplugs.jp/english/index.html>



Reports on environmental activities at business sites
Site Report
(Japanese only)



[Period covered] From April 1, 2011 to March 31, 2012
Some other very recent activities and cases are also included.

[Covered Organization]

- Social aspects: NGK SPARK PLUG CO., LTD.
However, this report may also cover activities of subsidiaries and affiliates inside and outside Japan. In such cases, specific company names are indicated.
- Environmental aspects: NGK SPARK PLUG Group
• NGK SPARK PLUG CO., LTD.
• 9 consolidated domestic subsidiaries and 1 affiliate.

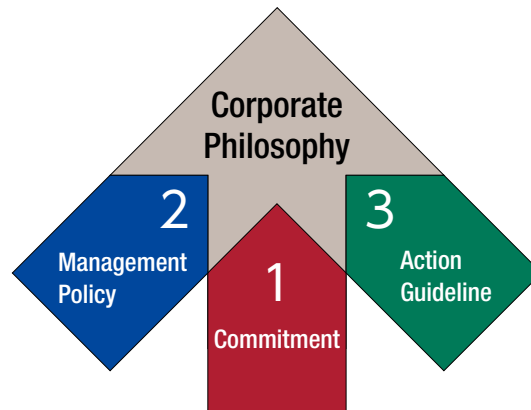
[Publishing Director] Shinichi Odo, President

[Editor in Chief] Yukashi Ukai, General Manager of CSR Promotion Office

[Published] September 2012

(Publication of the next report is planned for September 2013.
/Previous report was published in September 2011.)

Three elements constitute our corporate philosophy.



Management Policy

We offer a working environment in which each one of us is encouraged to make full use of his or her personality and capability. With all our power we are dedicated to pursue management based on trust and confidence.

- **Respect for Personality and Capability**
For sound development of business we create a corporate climate for our employees to utilize their personality and capabilities at their optimum level.
An excellent environment creates the original technology which is the most important, and fosters the formation of a rich personality.
- **Concentration of All Our Power**
The activities of individuals are organized efficiently to carry out strategic management.
- **Management based on Trust and Confidence**
Our company has been supported by a large number of people connected with us.
All the trust and confidence we have enjoyed is our great asset.
We read the trend of the times to keep one step ahead. We intensify further the trust and confidence in us by honest management.

Commitment

With full use of the most suitable technology and our accumulated experience, we continue striving to offer new values to the people of the world.

- **Contribution to Society**
We believe it our mission to offer people new values with the excellence of quality required for the time.
- **Activities in the Global Perspective**
We aim to become a company loved and popular among people all over the world through our global operations.
- **Technology and Customer Orientation**
We aim to be a leading company that continues to develop and offer original and creative products at the right time.
We challenge new fields using our experience gained in the ceramic business.

Action Guideline

Ever onward ! Always mindful of what is the best course, we swiftly put it into action.

- **Positive Advance**
Not content with things as they are, we always make an attempt to achieve new objectives. We are convinced that a continual and positive stance constitutes our driving force.
- **For the Best**
Setting our mind at all times to what is the best, we try to advance and improve ourselves.
- **Speed in Action**
We keep up with changes with the right judgment and speedy action.

[Slogan] With established trust and confidence inside and outside the Corporation, we aim to contribute to the peoples of the world by creating and putting at their disposal new values for the future.

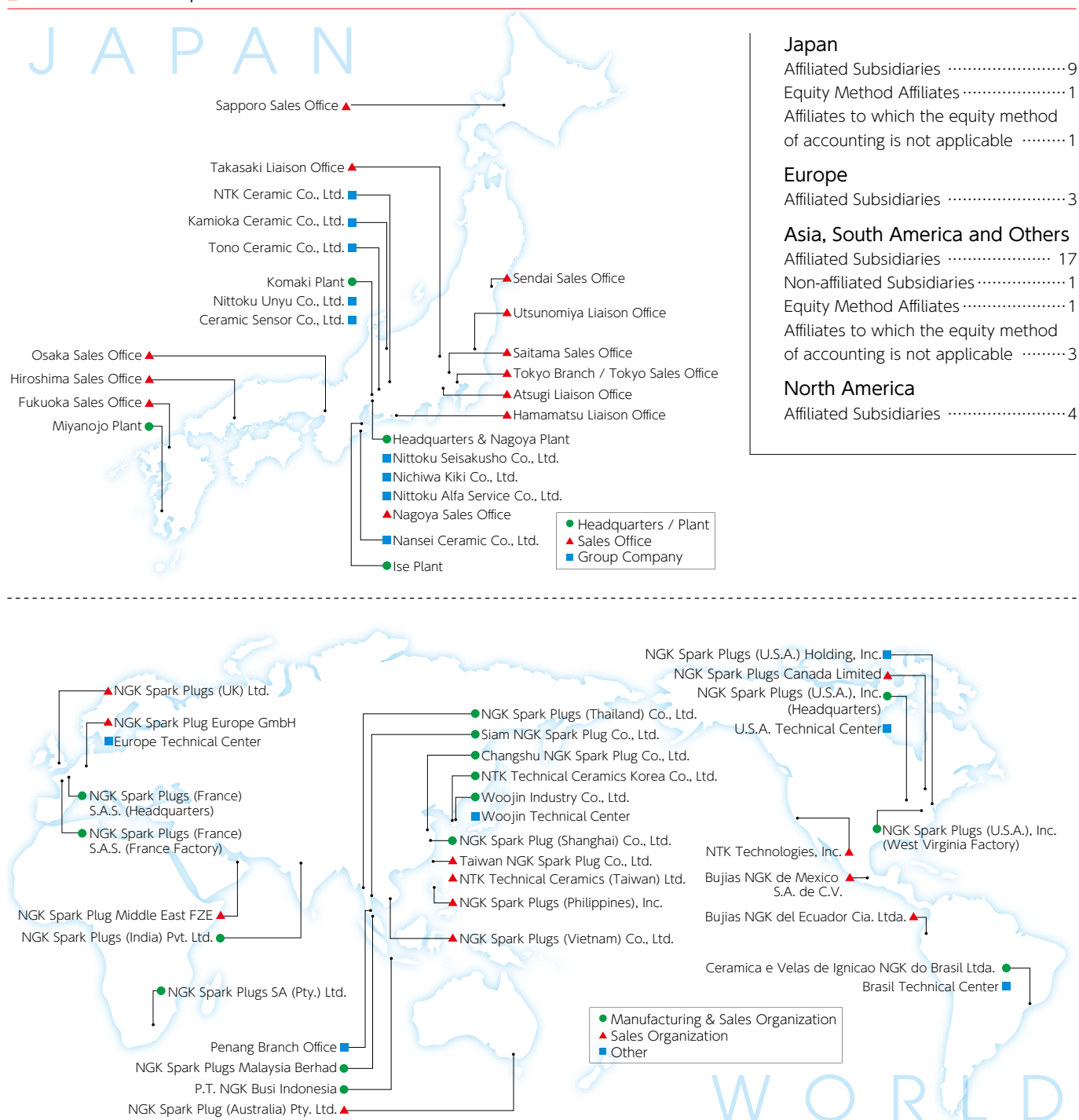
NGK SPARK PLUG Group Business Outline

Corporate Profile (As of September 2012)

Corporate Name	NGK SPARK PLUG CO., LTD.
Head Office	14-18 Takatsuji-cho, Mizuho-ku, Nagoya
Foundation	October 26, 1936
Capital	47,869,270,000 yen
Business	(1) Manufacturing and selling spark plugs and related products for internal-combustion engines. (2) Manufacturing and selling technical ceramics and applicable products.
Group Companies	34 subsidiaries (9 in Japan, 25 overseas), 6 affiliates



Network (As of September 2012)



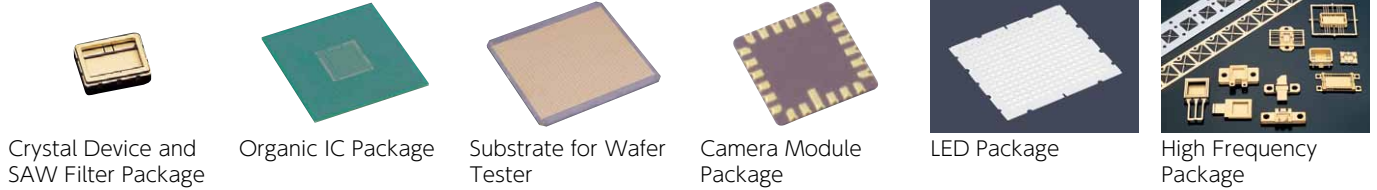
NGK SPARK PLUG Group Business Outline

Primary Products

Automotive Components Group



Communication Media Components Group

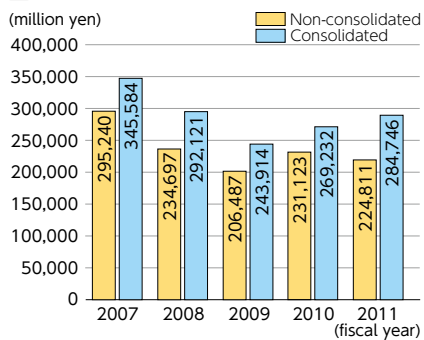


Technical Ceramic Group

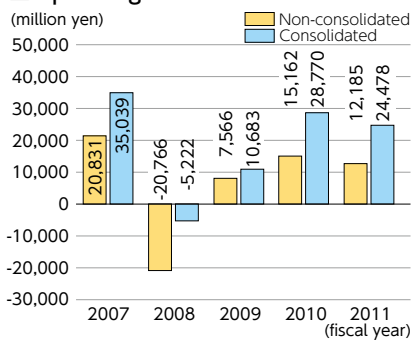


Financial Data

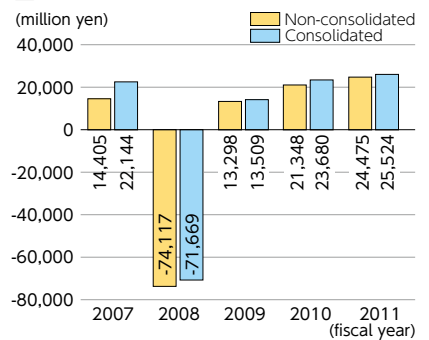
Net sales



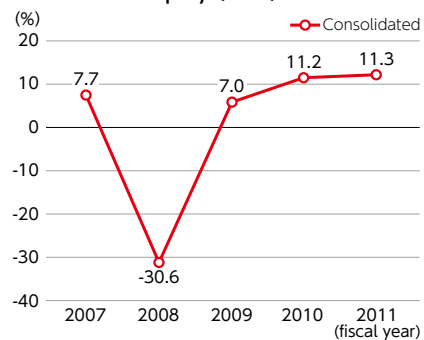
Operating income



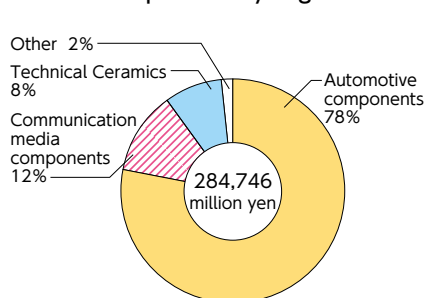
Net income



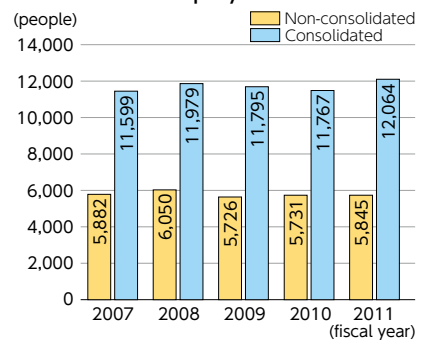
Return on Equity (ROE)



Sales Composition by Segment



Number of Employees





Message from the President

It has already been more than a year since the Great East Japan Earthquake of 2011. We are pleased to see the economy being reinvigorated in the affected area, thanks to the indomitable spirit of the Tohoku District people and ceaseless endeavor for reconstruction. Meanwhile, I understand that the disaster victims suffered severely, both physically and mentally. I would like to reiterate our deepest sympathy to all those affected, and sincerely hope that they can return to their pre-earthquake lives at the earliest possible date.

Toward Achieving Our Medium-Term Management Plan

The NGK SPARK PLUG Group envisages its ideal state in 2020 as a distinguished manufacturing company, a highly profitable company, a progressive company, and a personnel "assets" company. To achieve that vision, the Group has established the new medium-term management plan "The Evolution of the NGK SPARK PLUG," which is divided into three stages: Delving, Renovating and Evolving. This year marks the last year of the Delving stage (three years from fiscal 2010 to 2012), during which we are to delve into existing businesses and seek new businesses. In the previous two years, we reflected upon what our Company had done, and analyzed its position in the context of the entire industry and in comparison with other companies, so as to deepen understanding of our present conditions. Furthermore, to attain the objectives of this Delving stage, we are focusing our efforts on strengthening our research and development system, human resources and quality manufacturing capabilities.

Specifically, we have strengthened our research and development system by bolstering technology marketing functions and developing technologies and new products based on our ceramic technologies, mainly in the energy and environmental fields. These initiatives will facilitate our further growth. To accelerate that growth, we have set up the Engineering R&D Group and the New Business Advancement Group.

In terms of strengthening human resources, various reforms are under way to develop capable human resources suitable for a global company with operation sites in various parts of the world, and to promote diversity management. Building up a fair corporate climate will enhance the motivation of employees, enabling them to maximize their abilities and grow into human resources as important assets of our Company. We promote the establishment of a system to realize this goal.

To strengthen our quality manufacturing capabilities, it is essential to continuously secure cooperation and hand down expertise to future generations beyond the organizational boundaries, as well as to be deeply attentive to manufacturing facilities. In the belief that the foundation for consolidating our outstanding position as a manufacturing company lies in production technologies, we are committed to enhancing those technologies.

Through the above initiatives, we go all out to bolster the Company's basic capabilities and operating base. At the same time, the NGK SPARK PLUG Group aspires to its ideal state, paving the way for the next stages of Renovating (launching new products or new business) and Evolving (developing existing and new business at an accelerated rate).



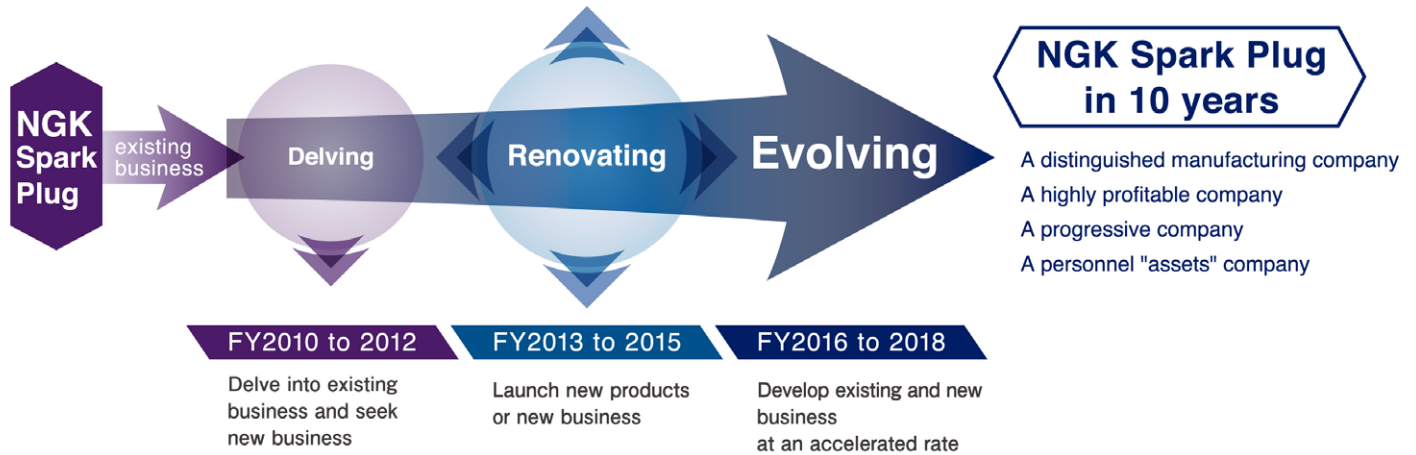
Shinichi Odo

President and Chief Executive Officer

September 2012

Message from the President

Overview of the New Medium-Term Management Plan



Environmental Initiatives

It is the mission of a company to strike a balance between economic growth and environmental preservation, and to achieve sustainable development in conjunction with society. We also believe that, in response to social expectations and challenges, our Company can further evolve by developing technologies and products that are friendly to people and the environment.

In April last year, NGK SPARK PLUG CO., LTD. formulated Eco Vision 2015, which stipulates targets to be accomplished by fiscal 2015. In fiscal 2011, the inaugural year of the Vision, we successfully achieved the total volume targets for greenhouse gas emissions, but fell just one step short of the basic unit targets. We continue to pursue improvements to reduce emissions.

As for technologies and products, through the commercialization of solid oxide fuel cells (SOFCs) we strive to realize a smart grid and promote the development of various products geared for a hydrogen energy-based society.

Promotion of CSR

Since the previous year, we have reviewed our initiatives for compliance and risk management, which constitute the fundamental fields of corporate activity. Concerning compliance, we established the employee education and helpline systems to prevent compliance violations. We also built up a violation surveillance and correction mechanism, which, should a problem occur, swiftly collects and disseminates information inside and outside the Company.

Regarding risk management, experiences in the Great East Japan Earthquake and the severe flooding in Thailand remind us of the

vulnerability of the supply chain and the importance of the BCP. We are now reviewing our business continuity management system so as to minimize impact of any natural disaster on our stakeholders, with priority given to the protection of human life.

Initiatives to Bring About Innovations

I was appointed President of the Company in June last year. Immediately after my inauguration, I made it my mission to bring innovations to NGK SPARK PLUG CO., LTD. taking advantage of my experience in managing an overseas local subsidiary, as well as my youth and aggressiveness. With "global," "speed" and "fair" as keywords, I am pushing forward with drastic organization and system reforms. This fiscal year, I introduced the corporate officer system to implement speedy decision-making and business execution. In addition, to reinforce the formulation and implementation of companywide strategies, the Corporate Administration Group was set up, to integrate Head Office functions.

I hope that all Group employees share the same vision and sense of values, and improve their individual capabilities, autonomy and creativity while respecting each other's individuality, so as to act in full awareness of their own missions. I believe that this would enable all employees to make optimum use of their capacity to drive innovations of the NGK SPARK PLUG Group. We will continue our efforts to be a company that is precious to all stakeholders.

We hereby release CSR Report 2012, which compiles our activities during fiscal 2011. We would very much appreciate your unreserved comments and opinions.

Feature 01

Spark Plugs with a Large Following around the World

We respond to diverse customer needs with global sales networks and extremely high level of services.



NGK spark plugs are the core products of the NGK SPARK PLUG Group.

We deliver products with excellent performance and high quality to our customers throughout the world via our long-established distribution networks.

We are ready to meet challenges head-on, including the growing demand for our products particularly in emerging economies.

Spark Plug Market

Spark plugs are functional engine components. NGK spark plugs, core products of the NGK SPARK PLUG Group, have been selected by most automakers and motorcycle manufacturers in the world. Since parts supplied for OEM use to automakers and motorcycle manufacturers are normally marketed under their own brands, parts suppliers are not always allowed to sell such parts in the aftermarket. Even in such market circumstances, we have established sales routes for distributing our spark plugs under the "NGK" brand concurrently with supplying them to automakers on an OEM basis. As such, NGK spark plugs are regarded as rare products in the aftermarket.

This is possibly due to the fact that spark plugs need to be replaced after a certain period of use, have an established aftermarket, and are required to offer high performance and quality as important engine components.

Globally Deployed Sales Networks

NGK spark plugs are sold and used in every part of the world thanks absolutely to our global sales networks.

Various sales routes exist in the world with their own unique market characteristics and historical backgrounds. In Western Countries, we have been supplying our products to traditional parts wholesalers and a matter of course and also to the huge retail company as the case of the United States. In emerging nations, we deliver our products and thorough services, via our dealers, to repair shops and retailers.

Although many enterprises rely on the experts of trading companies when merchandising overseas, we founded our subsidiaries in key countries and have achieved successful business results with expanded sales networks, providing spark-plug technical services in conjunction with local sales representatives and dealers.

Dealership Association Formed in Japan

In Japan, the NGK SPARK PLUG Group organized the NGK SPARK PLUG Dealership Association consisting of regional major parts shops. In 1972 the first national convention of the dealership association was held with 464 company participants. Now forty years later, member companies still number 430 nationwide.

Professionals on Spark Plugs

Employees of the NGK SPARK PLUG Group consider themselves professionals on spark plugs.

Our sales representatives and engineers visit automakers and dealers and hold workshops to directly communicate with our customers. Our sales reps and engineers understand diverse customer needs to support customers with precise advice.

Supply chain management (SCM) plays a vital and important role in improving customer satisfaction in every part of the world. For products supplied to automakers for OEM use, we have logistics centers at the closest possible locations to customers to provide 100% on-time deliveries. Moreover, we accurately track changes in the markets, improve demand forecasting accuracy and implement thorough inventory management in order to offer immediate delivery of repair products to many customers.

Every employee performs his or her duty as a professional to sustain our global sales networks.

Striving to Offer an Extraordinarily High Level of Service

Our strength lies in our long-established sales networks. The reason we are able to offer outstanding level of services is that our professionals are active in every part of the world.

China and India are expected to continue to grow in the future. We intend to expand our sales networks in such countries. Furthermore, we aim to build systems that will enable us to provide reliable products and exceptionally high level of services so that our customers throughout the world use NGK spark plugs with a sense of assurance.

We deliver NGK spark plugs to every region of the world!

One characteristic of the car maintenance industry in Britain is that parts retailers/wholesalers work between parts suppliers and car maintenance businesses.

Most of these businesses carry NGK spark plugs. This is a result of strong cross-departmental teamwork, as well as excellently engineered products.

Consequently, we have secured an unchallenged position in the industry, receiving supplier awards multiple times.

As a sales leader, I am proud of our performance.



Tim Ward
Senior Manager, Garage Trade
NGK Spark Plugs (UK) Ltd.

In the Philippines, an archipelago comprising 7,100 islands, complex wholesaling routes exist between our direct dealers and the consumer market. Our local staff and I tour consumer markets to raise brand awareness of "NGK" in a bottom-up manner and to expand sales of our products.

Our effort is unspectacular, but we do it every single day since there are no shortcuts to success.



Daisuke Watanabe
President
NGK Spark Plugs (Philippines), Inc.

NGK spark plugs are widely used at car repair garages throughout Japan thanks to distribution via the sales networks of NGK SPARK PLUG dealerships.

Through information exchanges with our dealerships, we identify what they need for conducting campaigns, offer promotional goods, hold workshops and introduce them to novel spark plugs. By achieving increased sales, we aim to bring about a win-win-win situation for our dealerships, us, and users.



Junji Higashi
Tokyo Sales Office

The Direct Sales Department handles the supervision of OEM business conducted with automakers in every part of the world. In the spark plug category, OEM business forms foundations for us to achieve success in repair business using our own sales networks.

We support our colleagues working on OEM business with automakers in every part of the world as well as in Japan.



Jun Chino
Assistant Manager
OEM Sales & Marketing Dept.

I take orders from overseas, make production arrangements with related departments, and process exports of finished products. Of course, I need to have an accurate understanding of regulations that differ from nation to nation. In addition, I need to properly handle schedule changes resulting from natural disasters or necessitated by customer request. I strive to precisely respond to customer needs.



Kayo Yamamoto
Supply Chain Management Dept.

The spark plug manufacturing staff produce spark plugs, being determined to deliver quality products to our customers, constantly bearing in mind the principle of "safety and quality first." Every member takes pride in the "NGK" brand and produces each spark plug with utmost care to maintain the brand's high reputation. I hope that spark plugs bearing the "NGK" logo will eventually be found in internal combustion engines all over the world.



Shigehisa Watabe
Production Dept., Komaki Plant

We receive requests from various automakers and end users and respond to them with our products. We also develop technologies that contribute to improved durability and fuel economy and propose them actively to automakers to keep up with advances in engine technology.



Takaaki Kikai
Spark Plug Engineering Dept.

I consider NGK spark plugs to have the world's best quality. The present quality level has been achieved through years of various experiences.

Our job is to deploy these experiences as a set of rules within the Group. We are able to deliver quality products to global customers because every employee in every region of the world adheres to these rules.



Koji Uchiyama
Supervisor
Quality Assurance Dept.

Feature 02

Playing Outstandingly Out of Sight

NGK SPARK PLUG Group Product Portfolio Supports People's Lives

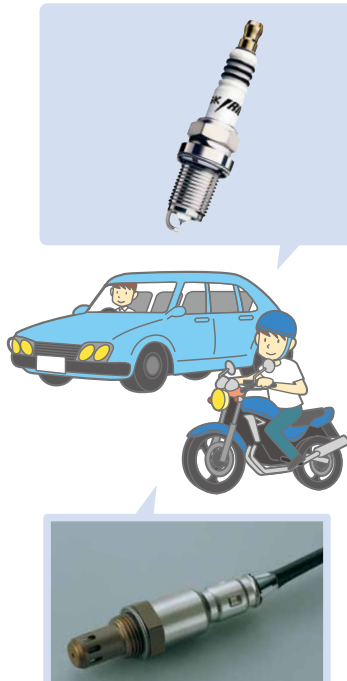


Since its founding, the NGK SPARK PLUG Group has offered new value to people around the world, constantly adapting to the trends of the times.

Our spark plugs and other products are used in various settings from familiar machines and devices—like automobiles, motorcycles and mobile phones—to infrastructures such as railroads, air transportation and communication networks.

In line with the global demands of the times, we intend to contribute broadly to society with our advanced products and technologies.

Spark Plugs for Better Energy Efficiency



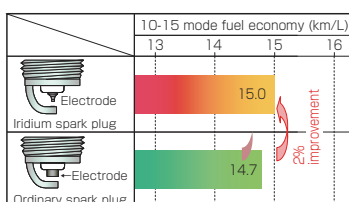
Spark plugs are functional components that, typically in automotive engines, ignite the mixture.

Our iridium spark plug features a thin electrode made of a high-strength, high-melting point iridium alloy. Consequently, it reduces the usage of noble metals and has long life. Furthermore, iridium spark plugs, with better ignitability performance, effectively improve fuel

economy and reduce hazardous substances in the exhaust gas.

Meanwhile, spark plugs themselves have become smaller, improving engine performance with increased fuel economy and reduced emissions. Spark plug size reduction also contributes to reduced use of raw materials and energy required for manufacturing (especially in the ceramics firing process).

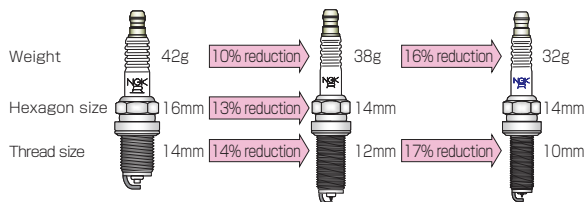
■ Fuel economy: iridium vs. ordinary spark plugs



Engine: 1.5 L, 4-cylinder DOHC Test Mode: 10-15 mode

* This is an example of in-house testing. Efficacy varies depending on engine type and driving conditions.

■ Spark plug size and weight comparisons

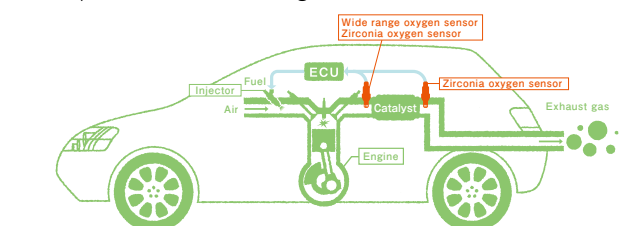


Automotive Oxygen Sensor for Global Environmental Conservation

The automotive oxygen sensor, used as a core part in exhaust gas cleaning systems incorporating a three-way catalyst, is a functional component essential for combustion control in internal combustion engines. Mounted upstream and downstream of the three-way catalyst, automotive oxygen sensors output electrical signals in response to the oxygen concentration of the exhaust gas. The role of these sensors is to appropriately control the engine air-fuel ratio, thereby reducing hazardous substances in the exhaust gas.

We need to comply with exhaust gas regulations in Japan, America and Europe, expected to become increasingly strict, and with regulations to be introduced in China and India. Therefore,

we have developed a new model of zirconia oxygen sensor with improved durability and heat resistance, a wide range air-fuel sensor that is an evolution of the oxygen sensor, and a small, light and highly vibration-resistant zirconia oxygen sensor for motorcycles to make exhaust gases more clean.



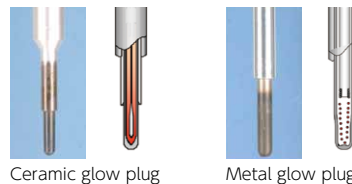
Glow Plugs for Reducing Hazardous Substances in Exhaust Gases



Glow plugs are used as preheating devices supporting combustion in diesel engines. Diesel vehicles offer good fuel efficiency and low carbon dioxide emissions and are thus attracting attention as a means of mitigating global warming.

We produce high-performance ceramic glow plugs that take advantage of the heat-resistant characteristics of ceramics. The use of ceramics in the heater enables rapid heating to high temperatures, thereby reducing startup time and hazardous substances contained in the exhaust gas immediately after startup.

There is also great demand for metal glow plugs due to their low material cost and electricity consumption. We have developed metal glow plugs that heat up as fast as ceramic glow plugs. Metal glow plugs are selected by many automakers.



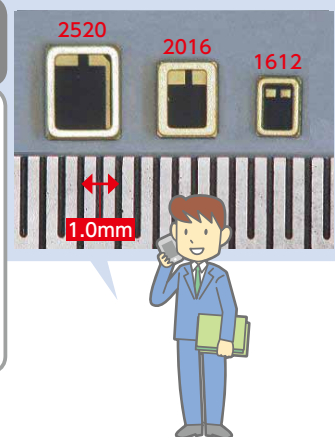
Quartz Crystal Devices/SAW Filter Packages for Downsizing of Communication Devices

Smartphone and tablets are developed to be multifunctional. It requires increasing number of components and miniaturization of devices.

We provide ceramic package for Quartz Crystal Devices which are essential for telecommunications. We have developed High-Strength Ceramic Material to provide

miniaturized package with high hermeticity, flexural strength, and high accuracy. 1.6 mm x 1.2mm size package is available as the smallest size in the production.

Miniaturization of our surface mount ceramic packages contributes downsizing of the devices and promotion of smartphones and tablets.



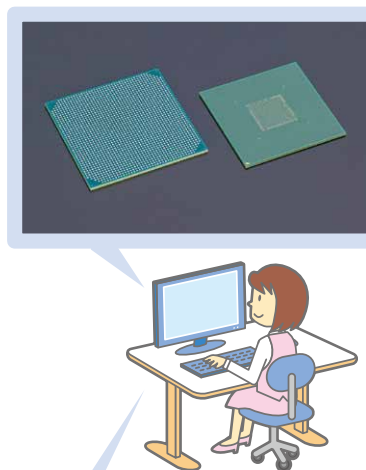
Organic Packages for Increased Information Processing Capacity

Organic packages are used widely as a substrate for CPUs and microprocessors which play a core role in making personal computers and smartphones more proficient. Optimally using ultra-fine wiring technology, we provide products that support both performance improvements and miniaturization. At the same time we are working on the development of next-

generation structures known as the 'coreless package'.

We intend to reduce environmental burdens through reduced material usage and space savings.

Additionally, the materials used for this technology promotes the use of halogen-free materials and lead-free solders meeting various environmental regulations.



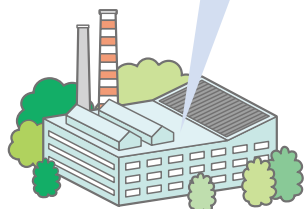
Electro-Static Chucks and Vacuum Chucks Support Nano-node semiconductor manufacturing

Semiconductors and liquid crystal panels have become an essential part of our lives. In systems designed for manufacturing these components, our static and vacuum chuck plates are used on machines to clamp silicon wafers and liquid crystal panels.

Optimally using the wear resistance, corrosion resistance and fracture toughness of ceramics, we offer suitable chucks for specific semiconductor equipments, thereby eventually supporting convenience and amenities in people's lives.



Boring Tool “MogulBar®” for Improved Machining Productivity



In general, it is likely happen uncontrollable chip control in boring process, which results in roughly inside surface finish of the workpiece with chip stuck to holder, especially in Swiss-type lathes.

These factors contribute to reduced productivity.

We have therefore developed MogulBar®, which incorporates a large clearance near the cutting edge, yet with holder rigidly intact, and have also developed a dedicated chipbreakers, combination of the chipbreakers and MogulBar® evacuates long chips from the end of the cutting edge toward the outside of

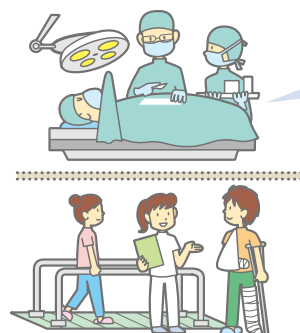
the workpiece.

Due to this new geometry, it will expect good control with improving productivity and surface finish.

In recognition of this achievement, the Japan Cemented Carbide Tool Manufacturers' Association has given a technical achievement award to NGK SPARK PLUG CO., LTD.



Ultrasonic Wave Oscillators in Wide Use for Medical Treatment



Ultrasonic waves are sound waves that humans cannot hear. We produce ultrasonic wave oscillators for use in industrial equipment such as ultrasonic cleaners and machining devices. In addition, in the area of medical treatment, our ultrasonic wave oscillators are widely used in scalers for efficient tartar removal, in surgical knives, and for calculus fragmentation.

Bioceramics Contributing to Treatment of Broken Bones and Bone Tumors

Bioceramics such as hydroxylapatite, alumina and zirconia are highly biocompatible. Taking advantage of this property, we have developed and commercialized bone fillers and artificial femoral heads.

Bone fillers are artificial bones. Missing pieces and voids occur due to bone fractures, bone tumors, or their treatment. Bone fillers fill such spaces for recovery and curing. Clay-like artificial bones (bone paste), which harden with time, appropriately fill the various missing spaces.

Our artificial femoral heads exhibit high strength and have surfaces machined with high precision. Accordingly, they are promising for realizing longer artificial joint life than conventional artificial metal femoral heads.



Bone paste



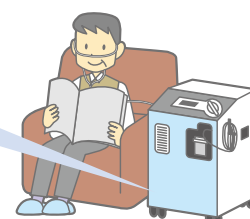
Artificial femoral heads

Medical Oxygen Concentrator "Sansomate-5F" Supports Patients with Respiratory Disorders

Medical oxygen concentrators provide higher oxygen concentrations to patients with chronic respiratory disorders using home oxygen therapy. Faced with the increasing number of elderly persons and society's growing welfare needs, medical oxygen concentrators are needed with improved energy-saving performance. Sansomate-5F consumes up to 63%

less power (compared to our conventional 5L models) thanks to its inverter control and other features. Moreover, the oxygen concentrator offers quiet operation with lighter weight.

The equipment has a large easy-to-read control panel and various alarms, which are just a few of its features designed for user friendliness and safety.



CSR of NGK SPARK PLUG Group

Fiscal 2011 Topics

- We established our CSR Policy, which comprises 10 policies for compliance, risk management, quality, environment etc.

Our CSR

We view CSR not just as a responsibility but as an opportunity to be accountable through review of the NGK Spark Plug Group's economic, environmental and social activities from a global perspective, to enhance corporate value, and to contribute to the sustainable development of society in accordance with our Corporate Philosophy.

Our CSR activities are wide-ranging, and include the following:

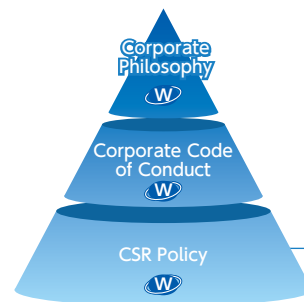
[Examples]

- Offering excellent products to customers
- Disclosing corporate information to shareholders and the broader investor community, in an optimal and easy-to-understand manner
- Collaborating with suppliers for mutual development
- Establishing a safe and employee-friendly working environment
- Participating in and supporting activities in the local community

To provide our Group's action guidelines for fulfilling CSR, in April 2011 our CSR Policy was established, which comprises 10 policies, such as the Compliance Policy and others. In line with the CSR Policy, we intend to review and promote CSR based on a multifaceted approach, into the future.

Philosophy and Policy Organization

Enhancement of Corporate Value



- Risk Management Policy
- Compliance Policy
- Information Security Policy
- Corporate Quality Policy
- Information Disclosure policy
- Procurement Policy
- Human Resource Policy
- Occupational Safety and Health Policy
- Social Contribution Policy
- Environmental Policy

Progress in our CSR activities

Nov. 1996	Adopted "Corporate Philosophy"
Feb. 1998	Adopted "Corporate Code of Conduct"
Apr. 1998	Established Ethical Committee
Feb. 2003	Adopted "Corporate Ethics Helpline System Operation Guidelines"
Nov. 2004	Revised "Corporate Code of Conduct" Published "Code of Conduct Guidebook"
Apr. 2005	Published "Guidelines on the Handling of Personal Information"
Aug. 2005	Established Export Control Committee Adopted "Export Management Regulations"
Feb. 2007	Adopted "Confidentiality Management Regulations"
Nov. 2007	Published "Confidentiality Management Guidelines"
Sep. 2008	Established Internal Auditing Office
Apr. 2009	Prepared "Corporate Protection Manual"
Apr. 2010	Established CSR Promotion Office
Oct. 2010	Established CSR Committee
Apr. 2011	Adopted CSR Policy
Nov. 2011	Established Compliance Committee
Jan. 2012	Published "Compliance Guidebook"
Mar. 2012	Adopted "Compliance Regulations"

CSR Promotion System

The CSR Committee determines the priority themes for each fiscal year, to implement CSR Policy. The Committee also oversees and evaluates CSR-related activities implemented by the respective committees, working groups and divisions, and makes appropriate proposals regarding them, so as to achieve full optimization of CSR activities, thereby strengthening our business foundations.

The CSR Promotion Sub-Committee sets up respective working groups as deemed appropriate, each of which holds discussions on specific themes, such as compliance, BCP, and CSR procurement, and develops countermeasures. In November 2011, the

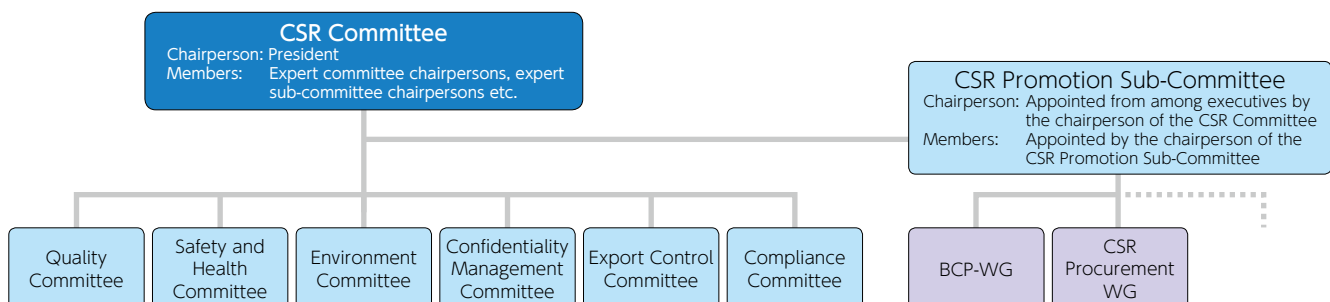
Compliance Working Group was upgraded to the Compliance Committee, as a subordinate body of the CSR Committee.

We have established a companywide CSR promotion system by securing close coordination among the CSR Committee, the CSR Promotion Sub-Committee and expert committees.



CSR Committee

CSR Promotion System



Compliance

Fiscal 2011 Topics

- In February 2012, we launched the compliance promotion system, clarifies which particular divisions are in charge of relevant laws and regulations.
- The Compliance Guidebook was distributed to all employees working at the NGK SPARK PLUG Group.
- The Compliance Regulations were adopted.

Basic Philosophy

We work to increase awareness among employees regarding compliance to act in a socially sensible manner, helping them to bear in mind that our enterprise is a member of society.

Compliance Policy

We acknowledge that our company is a member of society. In the light of this, we enhance corporate ethics, comply with laws and ordinances, international rules, and company regulations, striving to become a company trusted by the international community.

Action Guidelines

- We comply with all relevant laws and ordinances, the Corporate Code of Conduct, and company regulations.
- We regularly educate and raise the awareness of all our employees to impart a high-level of ethics and correct knowledge, with which they can act voluntarily to prevent compliance problems.
- Should a problem occur, we will promptly deal with the problem and fulfill our accountability, and will strive to identify the causes and prevent recurrence.

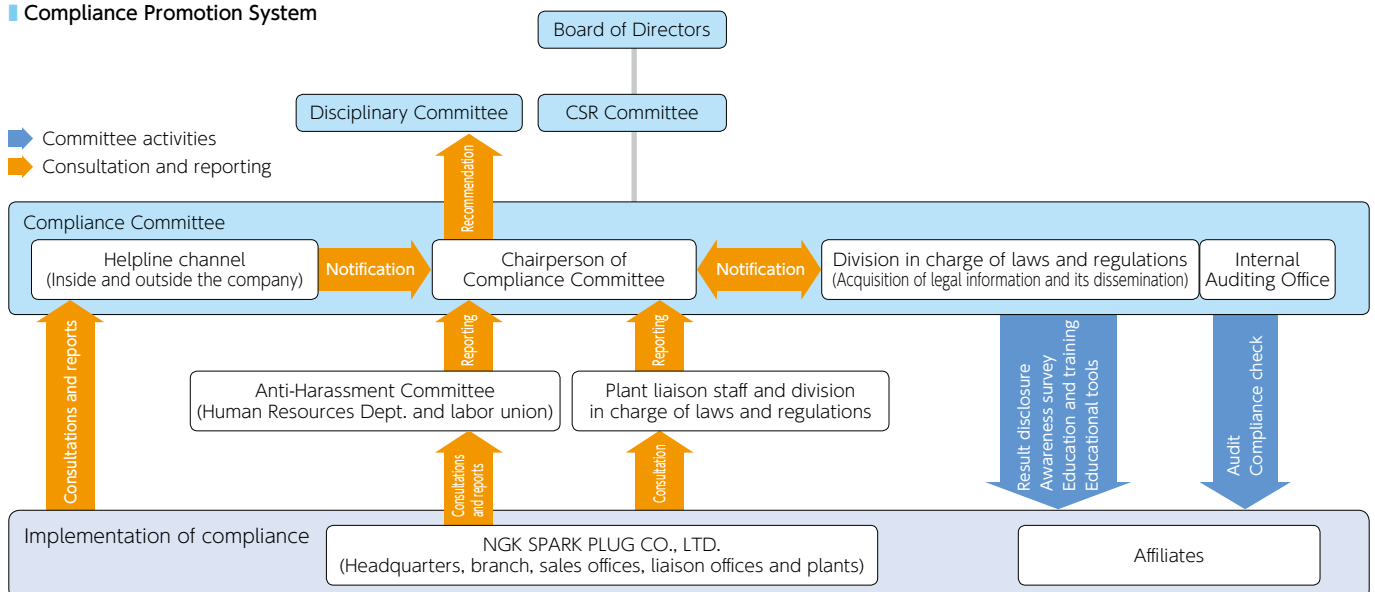
Compliance Promotion System

To promote compliance implementation, the Compliance Committee was set up as an expert committee under the CSR Committee. The divisions in charge of relevant laws and regulations obtain information on these laws and regulations, standardize compliance procedures, disseminate them to other divisions concerned, and check their compliance with these laws and regulations.

[Major roles of Compliance Committee]

- ① To provide guidance and surveillance to each division, as to its activities toward preventing compliance violations, and as to the division's responses if violation occurs.
- ② To accept and appropriately deal with consultations and reports submitted through the Corporate Ethics Helpline system.
- ③ To deal with consultations and reports regarding harassment, in cooperation with the Anti-Harassment Committee.

Compliance Promotion System



Compliance

Corporate Ethics Helpline

We have established an internal reporting system, called the "Corporate Ethics Helpline," to prevent compliance violations and to swiftly resolve any problems. We also set up reporting and consultation channels within and outside the company, which can be used by employees and other informers who have discovered an illegal or possibly illegal act, as a means of providing information

VOICE

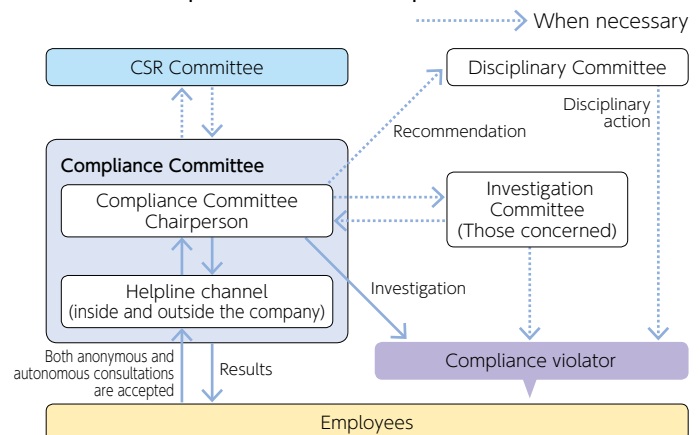
I have been working as a contact person of the Helpline since February 2012. Our company's Corporate Ethics Helpline system was established in 2003, but has remained almost unused, because the system has not been well known to employees. To address this problem, we hold compliance explanation meetings through which we promote the use of the Corporate Ethics Helpline system. Anonymous consultations are also accepted, making it easier for employees to use the system. The reported or consulted compliance violations are addressed promptly.

Yoshiaki Saiki
Senior Manager
General Administration Dept.



and seeking consultation. We strive to create an environment in which, from the informer's viewpoint, it is easy to consult, by clearly announcing that the confidentiality of all informers is protected.

Flow after Report Is Received via Helpline



Compliance Education and Awareness-Raising

We encourage every employee to take interest in business and legal affairs, and to be aware of the importance of such affairs. This will result in reducing risks not only to individual employees, but to our company as well. In this recognition, we compiled into a Compliance Guidebook, which has been distributed to all employees, the action guidelines as well as laws and regulations to be followed by Group employees. Employees at each workplace confirm the content of this guidebook to each other, so as to enhance their compliance awareness. We also hold compliance lectures during level-specific training programs, in which familiar examples are used to foster trainees' better understanding.



Compliance Guidebook

VOICE

In fiscal 2011, I served as a lecturer in the on-site seminars about the Act against Delay in Payment of Subcontract Proceeds etc. to Subcontractors. While the Act is a law closely relating to corporate activities, it is not familiar to the general public. I therefore attempted to give participants explanations, primarily focusing on the Act's outline and basic items. Every time I lectured, I received many questions from participants. I will make effective use of those questions and answers as valuable examples for future lectures.

Keizo Watanabe
General Administration Dept.



Export Controls

To maintain international peace and security, Japan has imposed legal regulations on trade that may assist the occurrence or expansion of conflict. NGK SPARK PLUG CO., LTD. has stipulated its Export Management Regulations to ensure thorough compliance with export restrictions, and has established a system that can flexibly deal with regulation revisions. In June 2008, our company was approved as an authorized exporter under the Authorized Exporters' Program, in recognition of its efforts in establishing cargo security management and compliance systems. We are committed to making proper import/export declarations.

We will continue to promote export controls and trade-related business in compliance with laws and regulations, and to improve trade efficiency, while fulfilling our responsibility as an enterprise with a high export ratio.

VOICE

For a company like us with a high export ratio, appropriate export management is indeed a matter of vital importance, and should be given high priority. The General Administration Department holds explanation meetings tailored to each workplace, to facilitate better employee understanding of the importance of export management, as part of our efforts to promote appropriate export management. We will continue striving to obtain the understanding and cooperation of each workplace.

Hiroki Inui
General Administration Dept.



Compliance

Security Control / Information Security

Needless to say, it is of great importance for companies to properly manage confidential information, in compliance with relevant legislation, including the Unfair Competition Prevention Act and the Act on the Protection of Personal Information. That importance is increasing with the rapid progress in information technology in recent years.

Under such circumstances, our company established the Confidentiality Management Regulations as part of our endeavors to properly manage the private information of our company, customers and suppliers. In response to the need of an information-oriented society, we plan to introduce smart devices in an appropriate manner, to ensure that we can swiftly carry out our work anytime and anywhere, giving top priority to the security of classified information. Our Privacy Policy is available on our website.

VOICE

To ensure security control, I consider it essential to develop individual employee awareness. If employees are not aware of what is confidential, they may leak confidential information without evil intention, resulting in tremendous damage to the company.

The Confidentiality Management Committee has formulated the rules that provide guidance for concrete confidential management, and works to make these rules known to all employees.

Tadashige Maegawa
Manager
General Administration Dept.



Information Security Policy

We regard our own information assets as one of our management resources. Through the protection and effective use of our information assets, we pursue healthy maintenance and development of our business.

Action Guidelines

- We establish information security regulations that clearly define the system and responsibilities to protect all the information assets we keep for our customers, our information assets as information resources, and personal data.
- We comply with laws, ordinances, and regulations regarding information security.
- We educate all executives and employees who handle information assets about the importance of information security, and about specific items to be observed.
- We continuously implement measures necessary to improve the management system and to protect our information assets, keeping pace with a rapidly-changing information society.
- If a problem with the information security system is predicted to occur due to unforeseen circumstances, we will promptly take action to prevent an accident associated with the problem. Should the accident occur, we will strive to minimize the damage and take preventive measures against reoccurrence.

Privacy Policy

<http://www.ngkntk.co.jp/english/privacy.html>

Protection and Effective Use of Intellectual Properties

To protect its existing and newly developed products, NGK SPARK PLUG CO., LTD. takes measures to actively acquire intellectual property rights and make effective use of them. We investigate and identify the intellectual property rights of third parties in all production processes, from early stages of development to mass production, to avoid the risk of infringing the intellectual property rights of third parties or violating laws and regulations. We will henceforth strengthen management of intellectual properties across the Group, as the basis for our continued evolution as a "manufacturing company".

Intellectual Property Training and the Incentive System

We hold level-specific training programs for engineers and technicians, to enable them to improve their knowledge regarding intellectual properties, accurately understand the value of inventions and acquire their rights. We also organize seminars on intellectual property rights strategies for managers, and invite outside lecturers. Moreover, a system was established to provide incentives or rewards for employee inventions, thereby enhancing their motivation for invention.



Intellectual Property Training

Anti-Counterfeit Measures

Counterfeits of some NGK SPARK PLUG Group products have been found. We require local regulatory agencies concerned to take appropriate action, not only because these counterfeits violate the intellectual property rights of our Group, but also because the use of low-quality counterfeit products may cause a malfunction or accident. We have also participated in activities led by industrial associations to eliminate counterfeits.



Spark plug package
(Upper: counterfeit, lower: genuine product)

VOICE

Although intellectual property rights are not conspicuous under normal conditions, they play an important role behind the scenes; actually, intellectual property rights are essential for advantageously carrying out business activities. During in-house training programs on intellectual property rights, we impart to trainees the necessity of intellectual property rights for our business operations. We also explain to trainees that raising compliance awareness among engineers and technicians is an important element that determines whether we succeed or fail as a manufacturing company.

Kohei Abukawa
Supervisor
Intellectual Property Dept.



Risk Management

Fiscal 2011 Topics

- Business Continuity Plan (BCP) Working Group set up to review our BCP.

Basic Philosophy

In operating business, we face many risks including natural disasters, accidents, terrorism, and the spread of new infectious diseases. If an unforeseen incident occurs, we will act giving top priority to the protection of human life. We have also made contingency plans so that we can smoothly continue our business operation even under such circumstances.

Risk Management Promotion System

Many of NGK SPARK PLUG Group's operation sites are located in an area vulnerable to three potential major earthquakes — a Tokai Earthquake, a Tonankai Earthquake, and a Nankai Earthquake. Ahead of other risk management measures, we therefore set up the BCP Working Group, under the CSR Promotion Sub-Committee, to review the BCP. As for risks other than major disasters, relevant divisions take the lead in our efforts to mitigate the effects.

Risk Management Policy

We are prepared to deal with various possible risks, such as natural disasters, accidents and spread of new infectious diseases. If such a risk should arise, we will act to minimize the impact on our stakeholders. We also work to restore and continue smooth business operations, thereby maintaining trust from our stakeholders.

Action Guidelines

- We strive to prevent factors that could affect business continuity.
- We conduct our activities with top priority on the protection of human life.
- We minimize impact on related parties.
- We strive for rapid restoration of business operations and stable supply of products and services.
- We take measures to prevent the recurrence of risks.

Reviews of the BCP

In reference to how local governments and companies responded to the Great East Japan Earthquake (March 11, 2011), we conduct reviews of our BCP including initial response to emergency. Meanwhile, we strive to increase the levels of employee recognition and understanding of the BCP, since they are vital for ensuring its effective functioning.

The establishment of a practical BCP will lead to enhanced transaction reliability in our future business activities. Each business division therefore works to review its BCP, which also covers our supply chain.

Response to New Infectious Diseases

To protect employee health from the influenza that prevail every year, and thereby ensure the smooth continuation of our business, we work to prevent the spread of the infections. If there is a sign of group infection at a workplace, we take immediate and intensive measures to contain the epidemic. During the flu season, we issue weekly report so that all employees can share the information and take effective countermeasures.

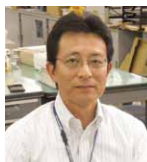
In addition, we are always attentive to the trending of the avian influenza H5N1, which is considered one candidate for the next pandemic influenza, and collect relevant information.

VOICE

The BCP Working Group promotes disaster-preparedness assuming the occurrence of possible earthquakes based on damage predictions by the Cabinet Office.

In fiscal 2012, we clarify the initial response to be taken in the event of earthquake, take in context and implement emergency drills. We also plan to perform business impact analysis (BIA), so as to devise measures focusing on important activities relating to our key products.

Yuki Aida
Supervisor
General Administration Dept.



VOICE

In April 2009, the novel influenza virus H1N1 broke out in Mexico and rapidly spread throughout the world. At that time, we were unclear about a way to address the problem, but it was a good experience. We aim to be prepared to take appropriate action, even if a new variant of the high pathogenic avian influenza such as H5N1, said to be the strongest ever of its kind, emerges and spreads from human to human in the future.

Shiko Abe
Health Care Promotion
Human Resources Dept.



Risk Management

Safety and Disaster Prevention

Each plant has established its own fire-prevention management system as part of our fire and disaster prevention efforts. As well, each plant has an in-house fire-fighting team, which always strives to improve its skills by conducting monthly disaster drills and participating in local skill competitions. These disaster drills, designed for general employees, adopt various scenarios; their programs include relief exercises and confirmation of evacuation areas, to be used in the event of tsunami.

In May 2011, a fire broke out in a room of the Komaki Plant. Due to periodic drills, however, employees immediately reported it to the firehouse and distinguished the fire at an early stage. Companywide inspections were carried out to eliminate the conceivable causes of the fire, so as to prevent the reoccurrence of a similar accident.



Relief exercise
(Ise Plant)



Water-discharge exercise
(Komaki Plant)

Corporate Governance

Fiscal 2011 Topics

- We reviewed and redeveloped the corporate governance system in preparation for introducing the corporate officer system in April 2012.

Basic Philosophy

We believe that it is our foundational and important managerial task to establish and maintain a fair and efficient management system, while securing soundness and transparency in management, in order to enhance corporate value by fulfilling our corporate social responsibilities.

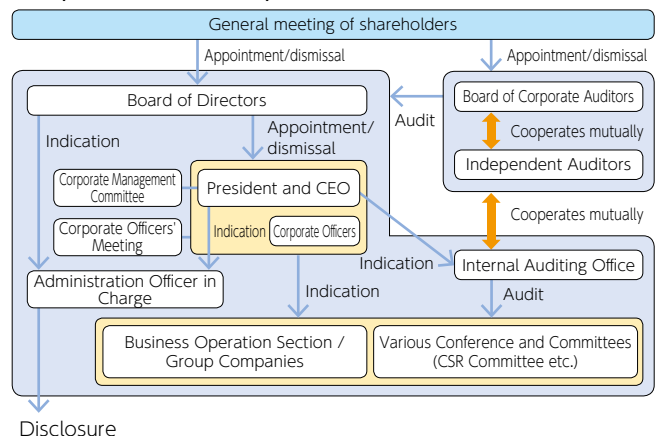
Management Organization

In April 2012 we introduced the corporate officer system and the system for determining officers' remuneration, based on assessment of their performance. These systems were introduced because we believe that, to achieve further development in the rapidly changing business climates and global economy, we need speedy decision-making and business execution. Moreover, decision-making rules were re-examined and revised to clarify where responsibility lies and to reduce decision-making time.

Management Oversight Functions

NGK SPARK PLUG CO., LTD. is a company with a Board of Corporate Auditors, which consists of two standing statutory auditors and two external auditors. These auditors attend the meetings of the Board of Directors and, if necessary, various committee meetings, to grasp the status of important issues. They also supervise directors' execution of duties, through audits of major offices and subsidiaries.

Corporate Governance System



Internal Audits

The Internal Auditing Office reports to the management the results of the business auditing of NGK SPARK PLUG CO., LTD. and its affiliates, and if necessary, makes proposals on how to correct any problems and improve business operations.

In accordance with requirements for the internal control report system over Financial Reporting under the Financial Instruments and Exchange Law, the internal auditing office assesses the effectiveness of internal control over financial reporting, to ensure the reliability of the Group's financial statements, thereby maintaining and improving our internal control.

Social Report

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With Our Customers

Fiscal 2011 Topics

- We worked hard for quality assurance from the aspects of systems and human resources, ensuring outstanding quality of our products.

Basic Philosophy

Under the continuously evolving business environment surrounding our Group, customers' quality demand is also becoming stricter and more complex. Against this backdrop, companies are increasingly expected to fulfill their corporate social responsibilities, by sincerely listening to customers' opinions, adequately and promptly responding to a wide variety of requests and issues, and meeting diverse expectations from customers.

To appropriately understand the diverse needs of customers and promptly take necessary actions from the viewpoint of customers, we at NGK SPARK PLUG CO., LTD. are committed to making companywide efforts to improve our quality assurance system, aiming to provide safe and reliable products that ensure greater customer satisfaction.

To meet customers' diverse expectations, we also continue actively communicating our products and service information to customers, while at the same time manufacturing products by making the best use of the most suitable technology and our accumulated experience as a manufacturer. Through these efforts, we will work hard to offer new values to society.

Corporate Quality Policy

We continue to supply "Quality Products" to society with an emphasis on "Customer First," "Total Involvement," and "Continuous Improvement" principle.

Action Guidelines

- We strive to take a customer-oriented approach to accurately understand a wide variety of customers' needs and provide quality products and services, aiming to ensure greater customer satisfaction.
- We encourage all our employees to be actively involved in quality improvement activities, based on companywide cooperation, and to achieve higher goals by making the best use of their own individual abilities and creativity to address problems and challenging issues.
- Accurately responding to ever changing social/market environments and the diverse needs of customers, we strive to continue improving our systems, processes, products and services, aiming to further grow as an energetic and sound corporation.

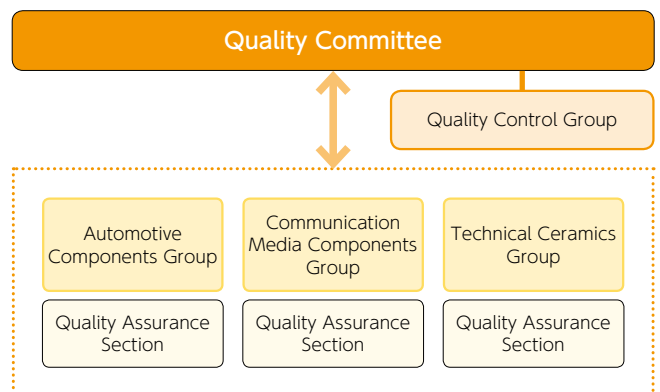
Quality Management System

Since its establishment in 1936, NGK SPARK PLUG CO., LTD. has always emphasized "Nittoku Quality Mind," representing the company's traditional mentality that ensures a quality-oriented manner of doing business. This tradition remains intact, as shown by our Basic Quality Policy revised in 2006.

Based on our corporate quality policy, our divisions have respectively established comprehensive quality management systems in conformity with the ISO9000 series and ISO/TS16949 standards, promoting quality assurance activities.

In addition, with the aim of reinforcing our company-wide quality assurance efforts, we have strengthened collaborative activities among our Quality Committee, Quality Control Group and quality assurance sections of respective business units, thereby establishing a company-wide system to control and supervise product quality. Under this system, the Quality Committee works to identify quality-related risks by reviewing operations throughout the organization and promotes corrective or preventive measures

against any identified risks, with the ultimate goal of providing safe and reliable products to customers.



VOICE

Since our company's foundation, our attitude toward manufacturing has been based on a policy of "no compromise on quality," known as "Nittoku Quality Mind," that represents the company's strong emphasis on quality integrity, ensuring the production of safe, reliable products of high quality to the satisfaction of customers.

In response to the tendency toward increasing severe

opinions for quality in society, we will further strive to improve the quality of our products through company-wide collaborative efforts for quality assurance, on the basis of our long-established quality-oriented stance.

Toshiki Sawada
General Manager
Quality Control Group



With Our Customers

Quality Improvement

NGK SPARK PLUG CO., LTD. is committed to quality management by promoting total quality management (TQM) activities.

- Top-down activities to embody our corporate policy in the policy management.
- Daily management to standardize prescribed operations at each workplace, as well as maintenance and improvement activities.
- Bottom-up activities to foster human resources and activate workplaces, by encouraging small groups to conduct quality and business improvement activities.

Education

We provide a wide variety of QC education and training programs about quality control, management techniques, QC circle activities, quality management systems, measurement management, etc. To ensure that knowledge gained through these programs is utilized in the workplace, we also offer practical guidance and support to our employees. As part of our activities to enhance quality awareness and motivation of employees as well as to promote quality education, we hold such events as process patrol by the President, quality-related exhibitions and lectures on quality.

We also provide practical guidance to our suppliers to promote quality education and solve problems, aiming to encourage them to deliver higher quality parts and materials by conducting continued quality improvement efforts.

NQC activities (small-group activities)

We promote "NQC Activities," which refer to QC circle activities that aim to develop human resources and improve workplace capabilities by continuously addressing various problems and issues.

During "Quality Month" every November, the results of NQC activities are announced at the central presentation meeting, and the President Award is granted in recognition of best practices. Commendation is also given to small groups implementing excellent NQC activities in daily operations. By encouraging employees to participate in presentation meetings and training programs outside the company, we strive to enhance their motivation and further activate small group activities.

Management of instruments and measuring operations

For quality control and quality assurance, it is essential to ensure the integrity of all measuring instruments and confirm the reliability of measuring results. For this reason, we conduct calibration of all measuring instruments on a regular basis to confirm their ability to make accurate measurements. The level of precision of measurement is affected not only by the precision of measuring instruments but also by the method of using them, and therefore we emphasize employee education on the appropriate use method of each instrument.

"Measurement" is one of the most fundamental operations in manufacturing for building outstanding quality, we continue to make efforts to improve the management of measurement instruments and measuring operations throughout our Group companies as well as our suppliers, by providing them with sufficient assistance, as part of the efforts to build our manufacturing competence.

VOICE

The meeting for exchange among production departments is a regular event held since 2009, in which we have a chance to talk with general managers and managers as well. Originally, the event used to emphasize "quality issues," but since last year, the "5S (five S's)" initiative has been the main theme. Personally, I had been confident about the manner in which I manage my workshop, but the recent visits of people invited from other departments to our workshop gave me opportunities for some discoveries and further raised my aspirations. I continue to keep in mind the importance of going back to the basics, remembering the basic, and staying close to manufacturing fundamentals by paying attention to "three actuals" – actual place (on-site confirmation), actual object (direct investigation), actual conditions (judgment of the status quo) – in making efforts to maintain good practices.

Yoichi Imaeda
Manager, Industrial Products Dept.
Fine Ceramics Div.



VOICE

My QC circle consists of only 8 members, and is a mixture of workers in three shifts and other shift patterns. Therefore, some members are always missing from our meetings. But it is still possible for us to keep things going smoothly and even to vitalize our activities, by making some efforts. The success of our efforts has been proven by the recent acquisition of the President's Award for our good performance.

Without being satisfied with the present conditions, we continue to make collaborative efforts toward our goals that we have set high with the ambition of reaching our ideals, in order to consistently improve upon present conditions.

Takashi Nakamura
Spark Circle (A)
Production Dept., Nagoya Plant
Spark Plug Div.



VOICE

I thought that I would go to the Instrumentation Office only when I need calibration of my instruments, but I have recently discovered that they can help us solve problems in diverse areas. Actually, thanks to their expertise and assistance, we have successfully promoted inter-plant standardization of instruments management methods, and thanks to their instructions, we have acquired skills in using and handling equipment appropriately. Their face-to-face assistance empowers line operators technically and mentally. This effect should be maintained, for further development of our manufacturing strengths.

Akira Hatanaka
Supervisor
Production Dept., Miyanojo Plant
Spark Plug Div.

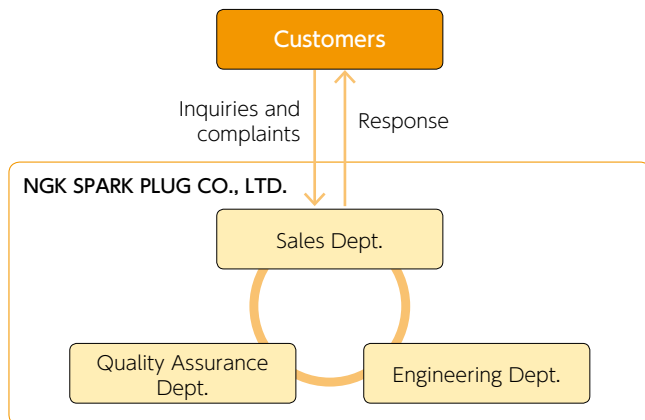


With Our Customers

Responding to Inquiries and Complaints

Inquiries and complaints on our products received from customers are first accepted at our sales division. Then the quality assurance division works together with the technical division to quickly respond and take necessary actions to the inquiries and complaints.

■ Response to inquiries or complaints



Information Dissemination through Websites

Our website named "Plug Studio" disseminates information on spark plugs, exhibitions at events, motor sports, etc. Using our applicable product number searching system, users can find a product number and the number of spark plugs applicable to the respective type/model of automobile.

Plug Studio

<http://www.ngk-sparkplugs.jp/english/index.html>

Responding Product Defects

We make it a rule that any product defect we have detected and found to possibly cause harm to customers be immediately announced to the public through our websites, newspapers, trade journals and other media as appropriate and that we simultaneously implement countermeasures against such defects to protect all users.

Communication through Exhibitions and Events

We use opportunities provided by exhibitions and auto races to directly communicate with customers on venue by showing our products and technologies, and also update our knowledge about market needs.

During the recent auto exhibitions and racing events, we held demonstrations of our spark plugs, to show directly to visitors how important it is to use a good product and make necessary replacements.



INTERNATIONAL CERAMIC EXHIBITION 2011



MECHATRONICS TECHNOLOGY JAPAN 2011



Plug replacement demonstration at the TOKYO Auto Salon 2012



PR Booth at the Suzuka 8 hours Endurance Road Race

VOICE

"It's informative!" "Easy to understand!" We heard these phrases frequently from visitors to our booth at MECHATRONICS TECHNOLOGY JAPAN 2011. We of the Cutting Tool Division were in charge of this recent exhibition, and our videos presentation via iPad successfully drew visitors' attention and contributed to the improvement of their understanding about our products. Our presentation was highly evaluated by visitors for its use of easy-to-understand videos. We continue to make efforts to improve our sales promotion of NTK's cutting tools, with taking advantage of state-of-the-art devices as appropriate.



Hideki Kato
Sales & Marketing Dept.
Cutting Tool Div.

Importance Notice about our Room Type Humidity/ Temperature Detectors and Room Type Humidity Detectors

Some of our room Type humidity/temperature detectors and room Type humidity detectors marketed during the period between 1987 and 2007 have been found to have a defect possibly causing thermal damage to users. Free servicing for these products started in April 2010, and we are still working hard to locate and reach all users of these products. Out of the total number of about 500 possibly defective units, 194 units have been located and repaired with safety countermeasures introduced (as of the end of July 2012).

With Our Shareholders and Investors

Fiscal 2011 Topics

- We held meetings for individual investors to communicate our corporate activities.

Basic Philosophy

We at NGK SPARK PLUG CO., LTD. are well aware that promoting transparent and fair information disclosure is indispensable to having all our stakeholders better understand and evaluate our business operations. To achieve this goal, in addition to meeting the legal standards of information disclosure, we also strive to strengthen information disclosure through various media and promptly post information on our website, with the aim of ensuring stakeholders' greater trust in our business operations.

Investor Relations

<http://www.ngkntk.co.jp/english/ir/index.html>

Information Disclosure Policy

Aiming to become an enterprise capable of receiving great support and popularity from people around the world, we strive to conduct transparent business operations and fair information disclosure.

Action Guidelines

- We disclose any corporate information required to be disclosed by the Financial Instruments and Exchange Act and other laws and regulations, in an accurate and timely manner.
- We actively disclose our corporate information, which is not subject to laws and regulations however deemed to be important for stakeholders, through our daily actions, such as issuance of a press release and updates of our website.
- We focus on enhancing communication with our shareholders, investors and other stakeholders to further promote mutual understanding with them.

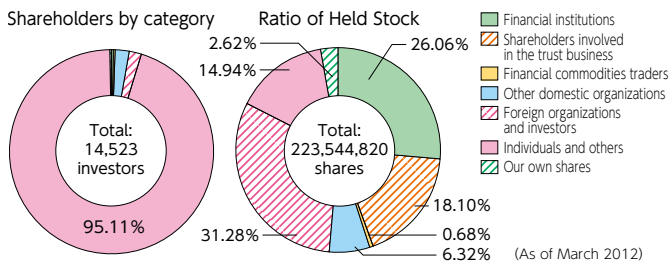
Shareholders' Meeting

Each June, we hold our Ordinary General Shareholders' Meeting, at which we explain the business results of the previous year to our shareholders, who then vote on the matters to be resolved. The stock distribution of NGK SPARK PLUG CO., LTD. is shown in the pie-chart below.



General meeting of shareholders held in June 2011

Share Distribution



IR Activities

Our shareholders and investors assist us in promoting the sustainable development of our business and improving our corporate value, and in this sense, they are not only supporters for us but also our important partners. So we actively communicate with them, through investor relations activities, to explain our business environment, financial conditions, visions and growth strategies.

For overseas institutional investors, we visit major financial centers in North America, Europe and Asia to see them individually on a regular basis. For domestic analysts and institutional investors, we hold meetings to explain about our organization. We also meet with individual investors from time to time to communicate our business activities, to ensure sufficient understanding on their side.

Returning Profits to Shareholders

Returning profits to our shareholders is one of the priorities on our agenda, and we aim to maintain consistent and stable payment of dividends. Presently, we seek to achieve a consolidated dividend payout ratio of 20% or more, and intend to continue semiannual payment of dividends. Our dividend payment plan is based on comprehensive financial strategies taking into consideration the following budgets; R&D expenses (as needed for future growth), capital investment (to expand or streamline our business) and internal reserves (for future investments).

Dividend per share during fiscal year 2011 was 22 yen.

PICK UP

Selected to be a Member of the Social Responsibility Investment (SRI) Index

We were selected for the ninth year in a row (as of June 2012) to be a member company of the FTSE4Good Index Series, the leading SRI index in the world. We will continue our concerted efforts to become an enterprise capable of winning the trust of investors.



With Our Suppliers

Fiscal 2011 Topics

- We held seminars for our procurement personnel to ensure their compliance with the Subcontract Act.

Basic Philosophy

It is indispensable to establish healthy partnerships with our suppliers to procure better raw materials and parts in a more timely and stable manner. Through our supply chain system, we work hard together with suppliers, aiming at mutual prosperity and further strengthened mutual trust.

Promoting CSR-Oriented Procurement

We promote the following activities for suppliers and our employees respectively, for the purpose of ensuring fair transactions with suppliers and the establishment of mutually beneficial sound partnership with suppliers.

<For suppliers>

- We actively communicate with our suppliers, through corporate policy conference, etc., to explain our corporate policy.
- We clarify our green procurement guidelines by explaining them on our websites. (Japanese only)
- We provide face-to-face assistance through diverse activities, including 5S workplace improvement activities and seminars.
- We renew contracts with respective suppliers reflecting our new CSR guidelines, strengthening compliance and environmental conservation.

<For our employees>

- We hold seminars for our procurement personnel to ensure their compliance with the Subcontract Act.



In-house seminar
on the Subcontract Act

VOICE

The mission of the Procurement Group is to supervise and optimize procurement activities of the NGK SPARK PLUG Group from a global standpoint, to contribute to production optimization throughout the organization. To this end, we play a role to coordinate between headquarters and respective divisions, building and strengthening mutual partnership with suppliers through fair and transparent transactions. Today, companies are expected to promote CSR procurement and also expected to be accountable to the society for procurement activities. Aiming to achieve these goals, we strive to promote our CSR procurement activities, ensuring our suppliers understanding and support for us.

Teppei Okawa
Corporate Officer
Procurement Group



Procurement Policy

We aim to realize globally optimal procurement based on our quality products principle. To this end, we focus on strengthening cooperation with suppliers and promoting our CSR efforts throughout our supply chain system, while at the same time striving to carry out proper purchasing transactions when procuring materials and parts, based on the following guidelines:

Action Guidelines

- We conduct rational transactions based on fair, transparent, and open competition.
- We select a supplier based on comprehensive assessment of its product quality, technology, prices, deliveries, and efforts to continuously make improvements.
- Aiming to become a good corporate citizen, we are engaged in business operations complying with applicable national and international laws and regulations.
- We ensure stable procurement of better quality products at a reasonable cost and an earlier delivery.
- Aiming to procure more eco-friendly products, we strive to promote our green supplier system.
- Aiming to have our suppliers understand our company, we strive to establish mutual trust with our suppliers. Recognizing that we and our suppliers can be good partners for each other, we strive to realize our mutual development.

Sharing Information on Our Corporate Policy

We hold a corporate policy conference to our main suppliers, offering them an opportunity to deepen their understanding of the present situation of our company and our goals.

At the conference held in May, 2011, explanation was given about our business performance, the fifth medium-term management plan, as well as respective division's policy under the plan. We also showed the direction to be taken by our company, reaffirming that we would work with suppliers to overcome the current severe business environments. In addition, we requested our suppliers to take responsible actions to appropriately control substances of environmental concern, promote quality improvement and cost reduction, and facilitate CSR activities.



We explained our vision to suppliers.

With Our Employees

■ Employment and Human Rights

Fiscal 2011 Topics

- We launched the full-scale “diversity” initiative.

Basic Philosophy

Acknowledging that employees are the most important management resources, we respect the diversity and individuality of our employees, aiming to cultivate a wide variety of human resources. We also place an emphasis on offering a desirable working environment in which individual employees are encouraged to make full use of their capabilities and potential.

VOICE

Things are changing rapidly inside and outside our organization. As we see people’s new sense of values, drastic market movements and emerging countries, it is certain that society faces drastic changes ever experienced.

We, at the Human Resources Department, work on the reform of our personnel system, with the goal of empowering our organization to gain the following strengths: ① the ability to cope with changes and survive difficulties, by developing diverse human resources with a can-do spirit and the ambition to create new business, products, technologies and markets, and ② a Group-wide personnel tracking system, allowing the company to identify excellent employees in domestic and overseas units so as to provide them with the right position and chance to use their talent and aspirations effectively.

We need and develop those people who have a discerning eye to distinguish “assets” from “wastes” for our organization, who never simply resign themselves to the present situation, who make strenuous efforts to cope with drastic changes and have an aspiration to realize an innovation.

Masakazu Mori
General Manager, Human Resources Dept.



Human Resource Policy

We acknowledge that employees are the most important management resources. In the light of this, we respect the diversity and individuality of our employees and cultivate abundant human resources, striving to promote the further development of our Group as a whole.

Action Guidelines

- Respecting the rights of our employees, we eliminate discrimination and harassments in employment, and avoid the use of forced labor or child labor.
- We secure and foster human resources who help pass down our quality products principle to the following generations. To this end, we provide learning opportunities and other programs to support the career development of our employees.
- We establish a personnel evaluation system to ensure that people with different qualities can fully realize their own capabilities.

Labor-Management Relations

Labor-management relations should be oriented to the combined employer-employee effort to contribute to society through the provision of good products and services. At NGK Spark Plug, both labor and management understand their respective responsibilities and strive to improve the work environment through mutual trust and cooperation.

■ Labor-Management Conferences

Labor-management conferences are held on a regular basis, providing interactive communication opportunities. During a conference, information exchanges are made and diverse issues are discussed, including topics of management issues and working-hours reform.

■ Reduction in Working Hours

We have a “no overtime day” once a week. On this day, labor union members and management representatives patrol all workshops to get all employees to leave at the designated time.



No overtime day

■ Anti-Harassment Measures

Labor and management are working together to prevent any harassment and to protect the human rights of all employees. The Work Rules of NGK SPARK PLUG CO., LTD. explicitly prohibit all sorts of behaviors that constitute harassment, and we have an anti-harassment committee responsible for the prevention of such behaviors. Also, all plants have an advisor designated jointly by labor and management to receive employees’ assertions or reports of harassment.

■ Greeting Campaign

We have been continuing the “greeting campaign,” encouraging employees to say, with a smile, “good morning” at the start of each day and “good bye” when leaving after work. Once a month, representatives of the labor union and the management stand at the entrance in the morning and after work, to exchange greetings with employees.



Greeting campaign

With Our Employees

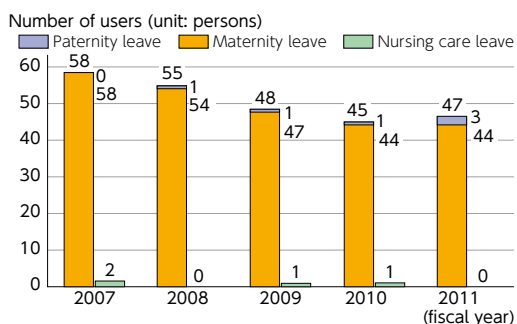
Promoting Diversity

We promote diversity of our organization, as we believe that the idea of diversity and inclusion is essential for companies to attain sound growth and ensure happiness of all employees. Here, diversity means an employee-friendly workplace accepting diverse people (where all people regardless of their gender, age, disability, nationality, etc. enjoy working) and also means diverse values and ideas that move the company forward.

Work-Life balance

Our employee demography shows that the number of those on maternity/paternity leave has been constant at around 50 persons in recent years. In our company, many female workers return to work after leave. Our Paternity/Maternity Plus program, which was newly established in 2010, is helping to gradually increase the number of male users of our childcare leave system. We believe that employees' increased time with their family members will eventually help improve the quality of their work life.

Number of employees using the leave schemes

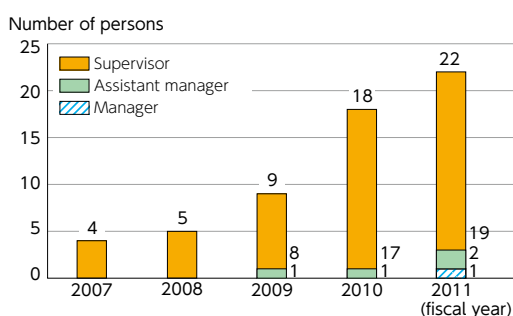


Empowerment of female workers

The ratio of female workers to the entire number of full-time employees is only 15%, partly due to the characteristics of our industry, but their average length of employment is as long as 13.2 years, which means that we have a favorable work environment for women including wives and mothers.

As of today, a total of 36 female workers have used our repositioning system (to transfer from general clerical positions to the managerial track) that was introduced in 1999, and the ratio of women to the entire number of employees on the managerial track has risen to about 10%. Accordingly, the number of female managers is gradually increasing from year to year. We continue to work hard to promote empowerment of female workers in our organization.

Number of female workers in a managerial post by fiscal year



VOICE

I've got twins, and decided to take a 6-month paternity leave. Both my wife and I are unable to receive help from our parents because they live in distant places, so I made my decision to take paternity leave quickly and without hesitation.

This opportunity to spend long, deep hours with my kids and doing housework has enabled me to think a lot about my work and family respectively. Also, the experience of full-time childrearing, allowing me to see closely every moment of growth of my babies – once-in-a-lifetime moments – was so precious and of great joy to me, and I am glad that I took this opportunity.

Koichiro Shimogami
Supervisor
Engineering Dept.
Organic Package Div.



Voices from paternity leave system users (Results of a questionnaire survey)

We conducted a questionnaire survey on 7 male employees who took childcare leave.

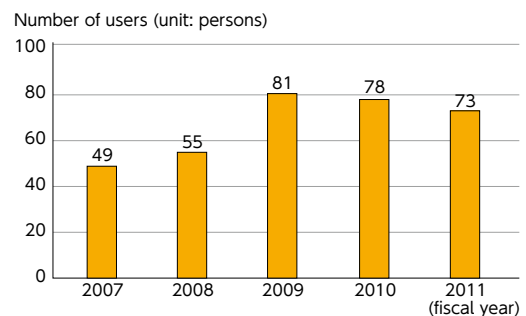
- All of the seven respondents say that they are satisfied with their decision to use the system.
- They recognize positive effects on their work, including improvements in their way of using time.
- Many say that more publicity should be given – the outline of the system as well as its relevance to wage and bonus should be explained more sufficiently.
- Six out of the seven belong to the same department that the first male user of this system belongs to.
- The length of leave varies widely, ranging from 20 days to 6 months.

Post-retirement reemployment

In 2001, we introduced a post-retirement reemployment system, with the aim of taking advantage of long-accumulated knowledge and expertise of retired employees and also satisfying their desire to stay at work.

Employment of the elderly population is an important issue for our society, as the national pension system has been reformed, deferring the starting age of recipients, and the demographic shift into aging society is quite rapid. We work hard to seek more possibilities for elderly workers, and intend to design various new reemployment systems that take into consideration aptitude, motivation and abilities of respective elderly people, so as to find mutually beneficial solutions for the employer and senior employees.

Number of retirees reemployed under the system

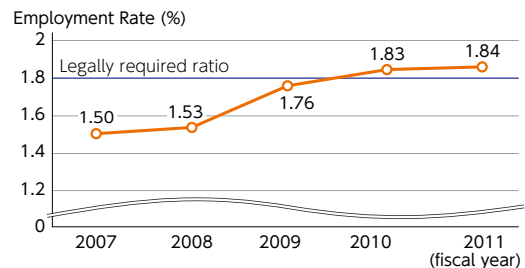


With Our Employees

■ Employment of the disabled

As a result of our efforts to promote the employment of people with disabilities, the ratio of disabled persons to the entire number of employees at our organization has reached 1.84% during FY2011, exceeding the legally required percentage. Placement of these disabled employees is conducted with sufficient care and attention to safety aspects, and we make efforts to provide them with a comfortable work environment. We continue to promote the employment of people with disabilities.

■ Percentage of Disabled Employees



Human Resources Development

We aim at the development of those who can communicate the company's traditional attitude of emphasizing quality-oriented principle to younger employees, and also those who have the ability to cope with changes inside and outside the organization and follow through reforms. To this end, we implement diverse education and training programs systematically, based on our corporate Human Resources Development Concept, with the aim of ensuring continuous capacity building of employees.

■ Education/training programs

Our education and training activities consist mainly of OJT (on the job training) opportunities, through which employees are trained to acquire skills and knowledge in their normal working situation. We also have OFF-JT (off the job training) programs, providing employees with learning opportunities outside their respective workplaces.

We have a total of 153 OFF-JT programs, that include "quality education," "environment/safety education," "education on the role of each track; global human resources education" and "career improvement support". During FY2011, a total of 4,951 employees participated in these OFF-JT programs.

Human Resources Development Concept

Fostering employees who, as a member of the corporate family, observe our corporate rules and independently take actions with a self-reliance spirit.

We seek:

- Persons who are full of curiosity and actively take on challenges
- Persons who flexibly adapt themselves to changes in circumstances, showing a positive attitude
- Persons who logically think from the other person's perspective and sincerely take necessary actions

■ Human Resource Development

Human Resource Development

Education/training programs

Education and training programs and others commonly necessary for the company as a whole

OJT

Onsite instruction of operations at each workplace

OFF-JT

Training outside a workplace

- Changes of workplace and/or occupational type
- Motivation enhancement
- Self-enlightenment

etc



Human Capital Development
Human Resources Dept.

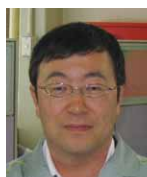


Orientation for new employees

VOICE

I participated in the training program for business leader candidates, in which I learned management strategies, marketing, finance and other practical knowledge in diverse fields. This seminar gave me the opportunity to not only acquire knowledge but also reflect on myself. Also, exchanges of opinions with other participants during the seminar contributed a lot to my aspirations, and I'm quite satisfied with the seminar.

Hiroyuki Maeda
General Manager, Sensor Engineering Dept.II
Sensor Div.



■ Ability Training System Diagram (OFF-JT)



With Our Employees

Occupational Safety and Health

Fiscal 2011 Topics

- Frequency rate of all occupational accidents turned out best in the past 10 years.
- We enhanced safety awareness activities by increasing hands-on safety training and introducing measures to ensure employees' compliance.

Basic philosophy

Occupational safety and health is the most familiar theme for employees in their daily duties. It is the most important theme for enterprises as well in their efforts to provide a working environment in which employees are encouraged to do their best in operations. We are well aware that offering a secure and safe workplace is our important corporate responsibility.

To this end, we established our occupational safety and health management system in 2006, aiming to realize "zero accidents" and secure safety at all workplaces. We will continue strengthening our safety and health management activities at a companywide level, aiming to establish a corporate culture of "safety first."

Occupational Safety and Health Basic Policy

We strive for occupational safety and health as the starting point of business activities on the basis of respect for human life and dignity.

Action Guidelines

- Observe laws and self-standards relating to occupational safety and health.
- Reduce risks and elimination of work-related accidents through sustainable improvement in occupational safety and health management system and performance.
- Prevent health hazards and promote the physical and mental health of employees.
- Publicize this policy among all the employees, promote consciousness through training and enlightenment, and expand toward the overall participation in labor safety and health activities.

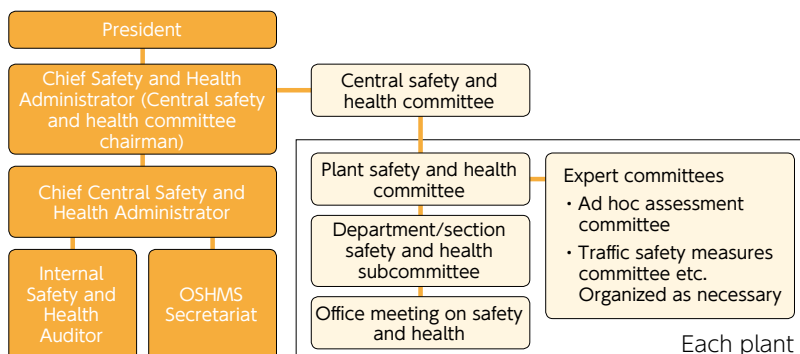
OSHMS

With the aim of eliminating on-the-job accidents and creating a comfortable, safe work environment, we have established an in-house occupational safety and health management system (OSHMS). We are accredited as complying with JISHA OSHMS Standards.

Each plant and office set safety goals and safety plans in accordance with our OSHMS guidelines, aiming to conduct OSHM activities based on a "total involvement" principle. To attain a step-

by-step improvement of our safety status, the progress and results of such OSHM efforts are verified by our internal safety and health auditors as well as the plant safety and health committee and the central safety and health committee.

Safety and Health Promotion Organization



*Each plant refers to Headquarters and Nagoya Plant, Komaki Plant, Miyanojo Plant, Ise Plant



Internal Auditor Training

With Our Employees

Target and Results

During fiscal 2011, we implemented the test introduction of a new risk assessment system to a model production line (in the Spark Plug Division at the Komaki Plant), which resulted in the successful establishment of a method to identify hazards through comprehensive and objective assessment. Also, we increased the number of plants that introduced hands-on safety training with accident simulations, by which we promote employees' behavioral accident prevention efforts.

In fiscal 2012, our new risk assessment system will be extensively introduced throughout the company. Also, in response to our previous year's failure to achieve certain goals, we will introduce the following measures: "the placement of soundproof shields to reduce noises" for "improvement of work environment" and "the revision of a patrol check sheet" for "enforcement of patrols for behavior relating to safety and health." In addition, we will enhance our education activities to raise the level of employees' commitment

to workplace safety and health management, through the improvement of both hard power and soft power.

VOICE

We have reformed our risk assessment system. Before the reform, we were viewing things subjectively to detect hazards, but now, we are able to take an objective view to identify hazards. Also, we have learned that we could improve the ability to detect hazards through the effort to inspect facilities and operations respectively and simultaneously.

Junichi Tanabe
Manager

Environment & Safety Management Dept.

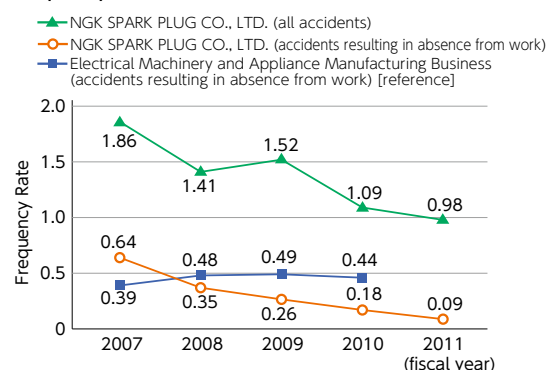


	Fiscal 2011			Fiscal 2012	
	Target	Results	Evaluation	Target	
1. Elimination of work-related accident	Essential safety of machinery and facilities, and promotion of self-management of them	The safety confirmation of machines and equipment in designing was enhanced. The voluntary management of them was enhanced.	○	Promotion of efforts to secure the safety and integrity of machines and equipment and ensure employees' autonomous attitude toward the maintenance of machines and equipment.	
	Intensive sampling of the present risks and an exhaustive publication of remaining risks	All existing risk sources have been identified at respective workplaces.	○	—	
	Promotion of new risk assessment	An educational method to promote understanding of the new risk assessment system was established.	○	Promotion of new risk assessment.	
	Completion of rules of operation methods and thorough compliance to the rules	Internal audits have found no problems in our compliance status.	○	Completion of rules of operation methods and thorough compliance to the rules	
2. Improvement of work environment	Improvement of work environments in harmful workplaces	Work environments in the second management category and the third management category for noise have not improved.	×	Improvement of work environments	
3. Promotion of health	Improved health management awareness	A lifestyle improvement program was conducted on applicable employees, and exhibitions promoting health improvements were held.	○	Utilization of results of periodical health examinations to ensure employees' autonomous health management and their receipt of necessary instructions and consultation.	
		Guidance on mental health was conducted by our corporate doctors. A mental health questionnaire survey among employees was also conducted.	○	Promotion of employees' autonomous efforts to maintain their mental health while empowering managers to fulfill their responsibility to supervise health conditions of their subordinates.	
4. Enhanced of education, training and enlightenment	Enrichment of training for safety and health in workplaces	Opportunities for hands-on safety training with accident simulations, as well as the number of participants in the training were increased.	○	Enrichment of education and training for safety and health in workplaces	
	Enforcement of patrols for behavior relating to safety and health	Mutual reminder activities were insufficient.	×	Enforcement of patrols for behavior relating to safety and health.	
	Promotion of measures for safety, sanitation, and health in daily life	Hazard prediction training was actively conducted at respective workplaces.	○	Promotion of measures for safety, sanitation, and health in daily life	

1. Elimination of work-related accident

During fiscal 2011, we registered the decade's lowest "frequency rate of occupational accidents" again, for the second year in a row. We believe that this achievement can be attributed to our enhanced efforts to introduce enhanced measures to identify and address potential dangers – especially for non-regular operations – and to increase education activities including consistent instructions given to employees to ensure their compliance with common operational rules throughout the organization. We see a mitigating tendency in our on-the-job accidents – today, the majority are minor-injury accidents (with no need for absence from work). The number of accidents occurring during commute to and from work is also declining, and this is also attributable to our introduction of traffic safety education.

Frequency Rate of Accidents



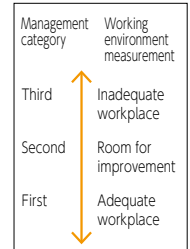
With Our Employees

2. Improvement of work environment

Targeting workplaces subject to significant dust pollution or severe noises, we conduct working environment measurement in accordance with the Industrial Safety and Health Act. Plants/operational sites that have been classified under the second or third management category are especially encouraged to take effective solutions to be classified in the first management category. We also take preventive measures against heat stroke incidents in summer by measuring WBGT, encouraging adequate intakes of water and salt, providing cooling items and the like, holding

seminars on countermeasures against heatstroke, and installing drinks vending machines.

Regarding an office work environment, we measure the level of lighting and CO₂ concentration to ensure the work environment is constantly favorable. In winter, we install humidifying devices in the office to help prevent the spread of flu viruses.



3. Promotion of health

We have a slogan – “Bring your best physical and mental condition to your workplace and maintain it until leaving.” Self-discipline is a key to the maintenance of one’s condition, and we promote employees’ autonomous health management efforts.

■ Health checkups

At our health checkups, employees can undergo additional tests other than general examination items by law. For employees with abnormal findings in the health checkups, our industrial physicians, clinic doctors and health management staff provide with follow-up care such as reexamination, close examination, medical treatment and others. We also promote our publicity activities to raise the level of our employees’ health consciousness and improve their attitude toward autonomous health management.



Health Care Promotion staff

■ Mental health care

We aim to educate our employees to increase their awareness of “line care (the practice that superiors pay attention to the mental health of their subordinates)” and “self-care (the practice to understand one’s own mental stress and cope with it)” through training programs conducted in and outside our company. We also

actively use a check sheet in the Self-care Handbook to encourage employees to increase their awareness of the importance of “self-care.” In addition, with the cooperation of our industrial physicians and clinic doctors, we conduct a questionnaire survey to ensure early detection of employees’ mental health problems. As part of our efforts to promote employees’ good mental health, we have also established a hotline outside our organization so that employees suffering any undesirable mental condition can make a call and receive consultation from a specialist.

■ Efforts by NGK SPARK PLUG Health Insurance Society

Working together with the company and the labor union, the health insurance society provides a wide variety of programs to support member workers’ mental and physical good health. Specifically, health management and disease prevention efforts conducted by the health insurance society include: metabolic syndrome improvement/prevention programs; subsidies for medical examinations; support programs for quitting smoking; subsidies for flu vaccination; and other health management promotion programs such as walking tours and bus hiking.

The health insurance society also operates three clinics at our domestic plants, as well as a resort facility for member employees in the Gokasho Bay area located in Minami-Ise, Mie Prefecture.

4. Enhancement of Education and Enlightenment Programs

As part of our daily activities to promote workplace safety and health management, we conduct occupational safety and health patrols, encourage information sharing about KYT and Hi-yari Hatto incidents, and encourage employees to meet and read out texts together of the Handbook for Safety and Health Management. Our internal auditors review these activities. Regarding problems identified at occupational safety and health patrols or at workplace meetings, they are reported to relevant local safety and health committees, to be discussed among committee members to find a solution.



Employees read our Safety Handbook.



Hands-on safety training for affiliated companies



Hands-on safety training at our Miyanojo Plant

In response to the recent increased number of on-the-job accidents caused by young employees, we introduced, to the fiscal 2010 training programs for new employees, hands-on safety training utilizing a machine for virtual experience of occupational accidents. In fiscal 2011, we increased these practical training opportunities to cover not only our plants but also workplaces of our affiliates.

VOICE

I was shocked when my arm was pulled strongly – much more strongly than expected – by a machine during the training with accident simulations. I feel horrified when I think such an accident could actually happen. Despite installation of various foolproof systems that could protect us, I think the most important thing which I learned from the training is to have an attentive attitude.

Toshiro Shimoda
Manager

Production Dept., Miyanojo Plant, Spark Plug Div.



With Local Communities and International Society

Fiscal 2011 Topics

- NGK SPARK PLUG CO., LTD. was appointed by the Nagoya Citizens Auditorium as its naming rights partner.
- We started participating in the "TABLE FOR TWO" initiative that supports school lunches in developing countries.

Basic Philosophy

We carry out various types of social contribution activities in areas where our production sites are located, aiming to enhance communication with local residents and help realize a more comfortable society. In conducting business operations throughout the world, we also respect the cultures and customs of local communities, aiming to contribute to the further development of local communities.

Social Contribution Policy

As a good corporate citizen, we at the NGK SPARK PLUG Group aim to contribute to society through the effective use of management resources.

Action Guidelines

- We focus on the following activities:
 - Activities closely related to our business fields and also to local communities
 - Activities that respect the cultures of individual countries and local communities, as well as activities that contribute to society such as traffic safety education programs
 - Activities that contribute to the next generation society, focusing on environmental conservation, science, and education, as well as cultures to be bequeathed to the next generation, etc.
- We strive to create a corporate culture that encourages executives and employees to participate together in social contribution activities as a social citizen. We also respect and support their active involvement in society.

Social Contribution Activities Involving Areas and Regions Close to Us

Support for students

Our group companies provide local junior high and high schools with hands-on work experience and training opportunities on demand, and also accept visitors to their plant facilities.



Hands-on work experience at a plant
(NGK Spark Plugs Malaysia Berhad)



Visitors to our plant
(NTK Ceramic Co., Ltd.)

Seminar on spark plugs held at mechanics training schools

Bujias NGK de Mexico S.A. de C.V. holds seminars on spark plugs and sensors at local training schools for mechanics. During fiscal 2011, a total of 6 seminars were held at four schools, in which 560 students participated as future mechanics.



Seminar at a mechanics training school



Seminar at a mechanics training school

We provided backup supplies for floods victims in Pakistan

In summer of 2011, about 9 million Pakistanis (according to the government) were affected by massive floods. NGK Spark Plug Middle East FZE distributed about 700 bags of rice, soy beans, sugar, blankets and other backup supplies to affected people in Sindh, a province in the southern part of the country that was affected severely.



Distribution of backup supplies



Distribution of backup supplies

With Local Communities and International Society

Social Contribution Activities Targeting Local Communities

■ Contributing to Culture in Nagoya by Purchasing Naming Rights

NGK SPARK PLUG CO., LTD. was selected as naming rights partner for Nagoya Citizens Auditorium, a major cultural facility in Nagoya. Accordingly, the hall's name has been NTK Hall since July 2012. Taking this opportunity, we will further contribute to cultural and artistic development with a view to vitalization of the local community.



Nagoya Citizens Auditorium



Ceremony for the official appointment of a naming rights partner

■ Helping local communities at the time of emergency

We are prepared for an immediate response, in the event of any major disaster, to provide support for local communities. Our headquarters have entered into a memorandum of agreement with the Mitsurugi School District in Mizuho-ku, Nagoya City for the provision of our materials and equipment at the time of emergency. Also, our Komaki Plant has concluded an agreement with Komaki City for the dispatch of our fire engine and in-house fire-fighting team to respond to any major disaster in the region.



In-house fire-fighting team of the Komaki Plant



Water spray drill

■ Traffic safety campaign

As a company engaged in the auto industry, we are socially responsible for ensuring traffic safety. We conduct a traffic safety campaign on a regular basis, in which we use signboards and banners and call out to pedestrians on the street, including local citizens and our employees, to raise the level of their attitude toward traffic safety.



Campaign at Nagoya Plant



Campaign at Komaki Plant

■ Miyanojo Plant designated as a heliport for a medical helicopter

In December 2011, Kagoshima Prefecture started to use medical helicopters for lifesaving operations. Miyanojo Plant athletic field has been designated as a heliport for medical missions, contributing to local society in securing a base for lifesaving operations.



Our athletic field designated as a heliport

■ Blood donation

In cooperation with blood centers of the Japan Red Cross, we encourage our employees to volunteer to donate blood, by holding blood donation events on a regular basis. During fiscal 2011, NGK SPARK PLUG's blood donation events were held four times at four of our plants. In addition, volunteers from our affiliates inside and outside the country, including NTK Ceramic Co., Ltd., Tono Ceramic Co., Ltd. and P.T. NGK Busi Indonesia, also donated blood.



Our employees register at the reception for blood donation (Headquarters and Nagoya Plant)



Employees of NTK Ceramic Co., Ltd. are donating blood.

With Local Communities and International Society

Social Contribution Activities Envisioning The Development of The Next Generation and Future Society

■ Participation in TABLE FOR TWO to provide school lunches in developing countries

Since October 2011, Headquarters and Nagoya Plant have been involved in TABLE FOR TWO, a program providing school lunches in developing countries. For each "healthy choice" meal served in the cafeteria, 20 yen is donated. Accumulated donations were equivalent to 11,923 school lunches by March 2012. The Komaki Plant and the Ise Plant have participated in the TABLE FOR TWO program since April 2012.



TFT (Table for Two) Day



"Healthy choice" meal

VOICE

A report from the TFT secretariat on smiling children enjoying a school lunch always makes me happy. The TABLE FOR TWO initiative allows us to volunteer easily, thus facilitating a wide participation of a large number of people. I am proud of being a part of this initiative.



Yuki Sugiura
Human Resources Dept.

■ Scholarship granted to Asian students

Nittoku Asia Foreign Student Scholarship Public Trust is a charitable trust that we established in November 2006 to commemorate our 70th anniversary of the foundation. This Fund targets Asian students studying in the Aichi Prefecture. In its fifth year (fiscal 2011), the Fund granted scholarships to 9 students.



Scholarship granting ceremony

■ Supporting vaccination through the donation of collected plastic bottle caps

Since July 2010, we have been participating in the movement for providing vaccines to children in developing countries, through collecting plastic bottle caps and donating them to NPO for children's vaccines. During fiscal 2011, we donated a total of 386,000 caps which would enable 483 children to take polio vaccine.



Cap collection box installed at
our cafeteria

■ Rugby promotion event held by our rugby team

NGK SPARK PLUG's rugby team provided a lesson for kids during the 7th Tag Rugby Competitions held in February 2012 in Kagoshima Prefecture. During the lesson, 15 team members taught rugby to about 100 children from elementary schools in Satsuma-cho.

Our rugby team has been playing in the Top Kyushu League B under the motto "FULL THROTTLE - with all out strength."



Rugby lesson



League game

Environmental Report

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Scope of Environmental Reporting

NGK SPARK PLUG Group

- NGK SPARK PLUG CO., LTD. (excluding Branch and sales offices)
- Nine consolidated domestic subsidiaries and one affiliate.

NGK SPARK PLUG CO., LTD.	Affiliates	
Headquarters and Nagoya Plant	Nittoku Alfa Service Co., Ltd. Nichiwa Kiki Co., Ltd.	NTK Ceramic Co., Ltd.
Komaki Plant Takenami Plant	Nittoku Unyu Co., Ltd. Ceramic Sensor Co., Ltd.	Nittoku Seisakusho Co., Ltd.
Miyanojo Plant		Kamioka Ceramic Co., Ltd.
Ise Plant	Nansei Ceramic Co., Ltd.	Tono Ceramic Co., Ltd.
		Tokai Taima Kogu Co., Ltd.*

 : Region (joint ISO14001 certification)

In blue : Included in the consolidated environmental accounting

* An equity method affiliate



Environmental Management

Fiscal 2011 Topics

- We commenced inaugural year activities for Eco Vision 2015.

Basic Philosophy

Environmental issues are a common challenge for all mankind. Every member of the NGK SPARK PLUG Group will work towards reducing the environmental burdens of our business activities as far as possible and developing and providing products and technologies that contribute to improving the environment. We will also endeavor to communicate in greater depth with our stakeholders including our local communities so that we may all work together to contribute to creating a sustainable society.

VOICE

Eco Vision 2015 was formulated last year in order to envision the ideal state of environmental affairs in 2015. Fiscal 2011 saw many drastic changes, but climate change (global warming) remains a global issue, and therefore this Group places emphasis on reducing CO₂ emissions.

In the future, the entire Group will continue its reduction efforts while considering CO₂ emission management that incorporates the supply chain, in the hope of contributing to establishing a sustainable society.

Takafumi Oshima
Member of the Board, Senior Executive Officer,
and Central Environment Committee Chairman



Environmental Policy

We positively promote actions for environmental conservation through all business activities to contribute to construction of a sustainable society with the participation of everyone concerned.

Action Guidelines

- **Environmental management:** We will abide by all laws, regulations, protocols, and voluntary standards relating to environmental conservation to prevent environmental pollution. We also aim to manage both environmental conservation and business growth by continually trying to enhance our environment management system (EMS) and environmental performance from a global point of view.
- **Business operation:** We will promote environmentally friendly business activity to contribute to prevention of global warming, resource recycling, and biodiversity conservation throughout the entire life cycle of our products from procurement of the materials to disposal.
- **Cooperation with society:** We will try to disclose information and to enhance communication for improving the trust of our stakeholders and deepening cooperation with society. We also try to enhance environmental consciousness by positively enforcing participation of all the employees in environmental conservation activities.

Environmental Action Plan

	Item	Fiscal 2015 Target	Fiscal 2012 Target
Environmental Management	Promotion of globally united actions	Formulation of global ecological vision.	Analysis of EMS operational state in overseas factories Drawing out standard for collecting reliable environmental data
	Promotion of environmental activities relating to corporate management	Transparentization of energy and waste cost and construction of system to promote actions for reducing the costs	Application method examination of material flow cost accounting
Business Activities	Reduction of CO ₂ emissions	Emissions: down 10% from 2007 Per unit production: down 8% from 2007	Emissions: 187,935 tons (down 10% from 2007) Per unit production: 0.748 tons/ million yen (down 5.6% from 2007)
	Reduction of disposal of wastes and valuable materials	Per unit production: down 30% from 2007	Per unit production: 0.070 tons/ million yen (down 28.6% from 2007)
	Reduction of water use	Per unit production: down 8% from 2007	Per unit production: 8.30 m ³ / million yen (up 9.5% from 2007)
	Reduction in PRTR emissions	Emissions: down 80% from 2007	Reexamination of recycling equipment of VOC
	Development of environmentally friendly products	Expansion of LCA to all the company's operation sites	Implementation of LCA to model products
	Enhancement of the management of chemical materials	Construction of a management system on chemical materials including supply chains	Introduction of chemical management software
	Promotion of green procurement	Expansion of the green supplier system	•Investigation / certificate audit implementation of original suppliers of domestic affiliates. •Renewal audit implementation of the suppliers certified in 2009
	Recycling of post-consumer products	Establishment of recycling technology for products and packaging materials	Examination of products recycling technology Implementation of package materials reuse
	Reduction of CO ₂ emissions in physical distribution	Domestic distribution energy per unit production: down 8% from 2007	Per unit production 0.422 kL/ 100 million yen (down 5% from 2007)
	Environmentally friendly sales activities	Promotion of environmentally friendly sales activities	Proposal of environmentally friendly sales strategies Enrichment of PR relating to environmental efficiency of products Disclosure of state of law abidance in overseas factories
Social Cooperation	Improvement of disclosing information	Improvement of disclosing global environmental information	•Acquisition of material data (procurement amount of raw materials and parts) in overseas factories •Disclosure of global material balance
	Enhancement of communication	Enhancement of communication with communities	Continual implementation of the environmental conferences Acceptance of plant tours of stakeholders Continual participation in EPOC international exchange subcommittee meetings
	Enhancement of social contribution	Enhancement of social contribution to communities	•Continual implementation of the clean-up activities •Enhancement of beautification activities around plants •Participation in a variety of environmental activities
	Enhancement of actions for biodiversity preservation	Enhancement of actions for biodiversity preservation	Examination of activities for Satoyama (planted/managed natural woodlots) preservation activities and cooperation with NPO/NGO and governments
	Enhancement of environmental consciousness	Enhancement of environmental education	Enhancement of level-specific training in the domestic Group Drawing out educational materials for overseas factories

Environmental Management

Fiscal 2011 Targets and Results

The NGK SPARK PLUG Group Eco Vision 2015 is a vision established in 2011 indicating the ideal state of environmental activities by this Group in 2015. We set targets for every year in our environmental activities in order to achieve Eco Vision 2015. The following table indicates the targets and results for fiscal 2011, the inaugural year of the Vision.

During fiscal 2011, the Environmental Policy was shared globally. The CO₂ emission reduction goal was achieved in total, but remained unachieved in terms of per unit production. We will continue our efforts into fiscal 2012 so as to achieve the targets.

Fiscal 2011 Targets and Results

	Item	Fiscal 2011 Target	Result	Evaluation
Environmental Management	Promotion of globally united actions	Sharing of environmental declarations and policies of the domestic Group with overseas factories	Requested overseas factories to place the environmental declarations and policies of the domestic Group on top of their respective environmental policies.	○
		Understanding of the current state of EMS in overseas factories	Conducted surveys targeting overseas factories.	○
		Implementation of the new environmental management information system in domestic Group	Commenced operation of the new environmental management information system.	○
	Promotion of environmental activities relating to corporate management	Conversion of environmental loads, such as CO ₂ and wastes, to cost in domestic Group	Cost conversion was conducted for CO ₂ , but not for waste.	×
Business Activities	Reduction of CO ₂ emissions	Emissions: 186,725 tons (down 11% from 2007) Per unit production: 0.780 tons/ million yen (down 10% from 2007)	Emissions: 177,435 tons (down 15% from 2007) Per unit production: 0.789 tons/ million yen (up 11% from 2007)	×
	Reduction of disposal of wastes and valuable materials	Per unit production: 0.072 tons/ million yen (down 26% from 2007)	Per unit production: 0.067 tons/ million yen (down 32% from 2007)	○
	Reduction of water use	Per unit production: 7.77 m ³ / million yen (up 2.5% from with 2007)	Per unit production: 7.52 m ³ / million yen (down 0.8% from 2007)	○
	Reduction in PRTR emissions	Reexamination of recycling equipment	It was deliberated, but no implementation was made due to present issues such as capacity.	×
	Development of environmentally friendly products	Determination of the range of data collection Acquisition of required data	The range of data collection has been decided and collection has commenced for all divisions.	○
	Enhancement of the management of chemical materials	Examination of the management system of chemical materials	A working group was established in which necessary matters for the management system were deliberated.	○
		Investigation of the status of chemical materials and storage of the data	It has been decided to use commercial software, and pre-implementation collection of data has been suspended.	○
	Promotion of green procurement	Expansion of the green supplier system to the domestic affiliates	•Briefed seven companies of the green supplier system. •Revised the Green Procurement Guidelines as a policy for the entire Group.	○
	Recycling of post-consumer products	Examination of recycling technology of products	Could not establish the technology.	×
		Examination of the reuse of package materials	Deliberated on the systemization of packaging collection.	○
	Reduction of CO ₂ emissions in physical distribution	0.426 kL/ 100 million yen (down 4% from 2007)	0.459 kL/ 100 million yen (down 3.4% from 2007)	×
	Environmentally friendly sales activities	Proposal of environmentally friendly sales strategies	Expanded sales of environmentally friendly products.	○
		Enrichment of PR relating to the environmental efficiency of our products	PR for environmentally friendly products was conducted at exhibitions and through catalogues.	○
Social Cooperation	Improvement of disclosing information	Disclosure of the state of law abidance in overseas factories	Investigated the law abidance status of overseas factories, but the delay in verification prevented the disclosure.	×
		Acquisition of material data (procurement amount of raw materials and parts) in overseas factories	Obtained material data from overseas factories, but some survey items were lacking, and tallying was not achieved.	×
	Enhancement of communication	Continual implementation of the environmental conferences	Held at eight sites.	○
		Acceptance of plant tours of stakeholders	Accepted plant tours of stakeholders at five sites.	○
		Continual participation in EPOC international exchange subcommittee meetings	Continued participation in EPOC international exchange subcommittee meetings.	○
	Enhancement of social contribution	Continual implementation of the clean-up activities	Each plant/ affiliate participated in environmental activities, cleaning activities, etc., hosted by local municipalities.	○
		Participation in a variety of environmental activities		○
	Enhancement of actions for biodiversity preservation	Planning of guidelines relating to biodiversity	Formulated the Group's Biodiversity Action Guidelines.	○
		Examination of activities for Satoyama (planted/ managed natural woodlots) conservancy and cooperation with NPO/NGO and governments	Prioritized biodiversity education to employees. Will continue investigation of activities for Satoyama conservancy.	×
	Enhancement of environmental consciousness	Enhancement of level-specific training in the domestic Group	Investigated the needs for and systematized level-specific training.	○
		Understanding of the implementation status of environmental education in overseas factories	Understood the implementation status of environmental education in overseas factories through questionnaire surveys.	○

Environmental Management

Promotion System

To conduct systematic and effective environmental preservation activities, we have established an environmental management system following the environmental policy shared by the entire Group, and every member of the Group is striving to achieve our Eco Vision.

The status of system operation is confirmed through internal audits, and at the same time, the central and regional environment committees check progress towards achieving our goals and endorse challenges for each group/ division/ region/ department to facilitate continuous improvement.

The organization was reviewed in fiscal 2011; the Chemical Substance Subcommittee and the Green Procurement Subcommittee were consolidated into the Chemical Substance Management Subcommittee so as to ensure proper compliance with chemical substance regulations that are becoming more and more stringent. Also, the Logistics Subcommittee has been newly established to enhance environmental efforts in the logistics field.

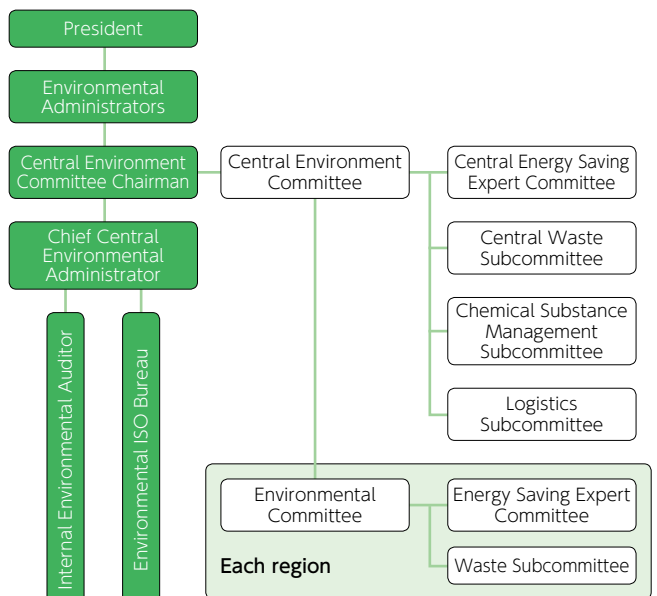


Internal environmental audit



Central Environment Committee meeting

Environmental Activity Promotion Organization



*"Each region" refers to the Headquarters Region, the Komaki Region, the Miyanojo Region, the Ise Region, and affiliates.

The Establishment Status of our Environmental Management System

Details

We received ISO 14001 consolidated certification for NGK SPARK PLUG CO., LTD. and 10 domestic affiliates.

Overseas corporations are currently being encouraged to seek individual ISO 14001 certification; as of the end of fiscal 2011, there are 13 overseas corporations with ISO 14001 certification.

Certification for the entire employee body of the Group, including both domestic and overseas sites, has reached 98%. We are further promoting certification in overseas corporations.

Environmental Education

Details

We conduct environmental level-specific education for each rank to increase the environmental awareness and knowledge of our employees.

In addition, we familiarize people with our environmental policy using the Environment Card, provide environmental information via company newsletters, and present case examples on the Environment/ Safety/ Health website. The annual Health, Safety and Environment Conference held in fiscal 2011 in each region presented panel and sample exhibits, which were participated in by many employees.



Environment Card



Health, Safety and Environment Conference

Environmental Management

Environmental Accounting

Details

What is important in promoting environmental management is to gain a grasp of the costs and effectiveness of environmental preservation activities. We have been adopting environmental accounting since 1999, and in 2003 the accounting scope was expanded to include the entire Group.

Environmental preservation costs for fiscal 2011 totaled 9,226 million yen on a non-consolidated basis, and 10,019 million yen for the Group. This was an increase of 14% compared to fiscal 2010. The effect of environment preservation measures was 331 million yen on a non-consolidated basis.

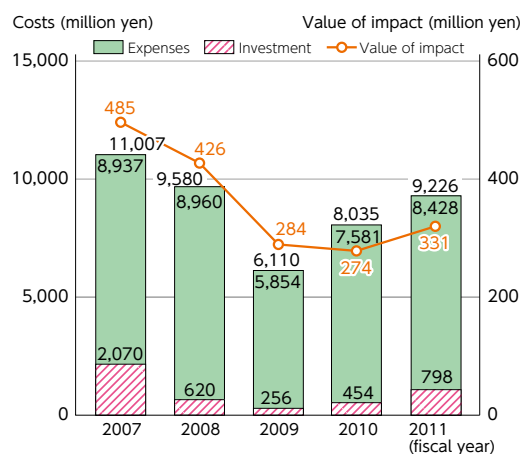
Calculation Method

Environmental preservation costs are proportionally calculated by categorizing items in conformity with the guidelines issued by the Ministry of the Environment of Japan, then prorating them in accordance with the rules of the NGK SPARK PLUG Group, created based on actual direct investment and expenses. Since fiscal 2011, the data tabulation method has been changed from the conventional twelve-month reduction method to net method to improve accuracy.

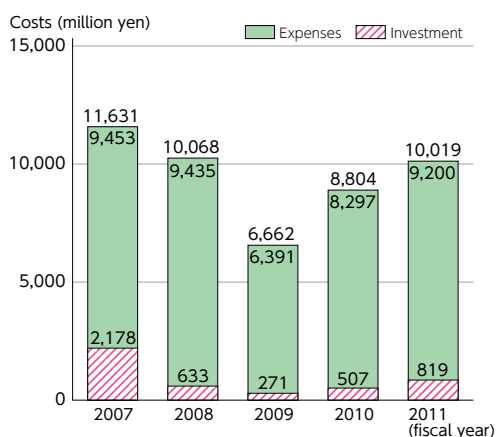
Value of Environmental Preservation Impact (non-consolidated) (million yen)

Content of impact		Amount
Earnings	Business earnings from recycling waste generated during business activities, used products, etc.	203
Cost reduction	Cut in energy costs by conserving energy	116
	Cut in water costs by conserving water	4
	Cut in waste disposal costs by conserving resources and recycling	8
Total		331

Environmental Preservation Costs and Value of Preservation Impact (non-consolidated)



Environmental Preservation Costs (Group)



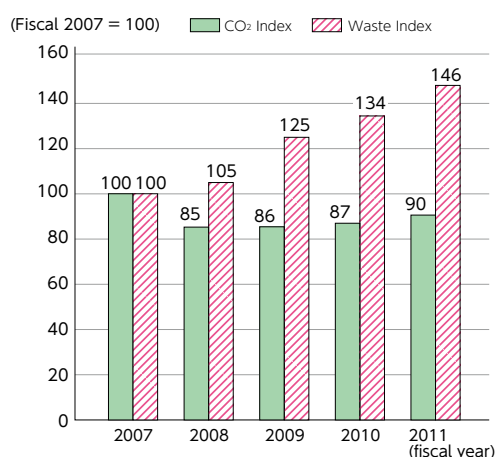
Eco-efficiency

We calculate eco-efficiency by determining net sales per unit of CO₂ emissions and generated waste, and endeavor to improve it. Fiscal 2011 saw an increase in both the CO₂ index and the waste index compared to the previous fiscal year. Summertime energy conservation measures improved CO₂ efficiency.

$$\text{CO}_2 \text{ Index} = \frac{\text{Net sales}}{\text{CO}_2 \text{ emission volume by production}}$$

$$\text{Waste Index} = \frac{\text{Net sales}}{\text{Volume of waste}}$$

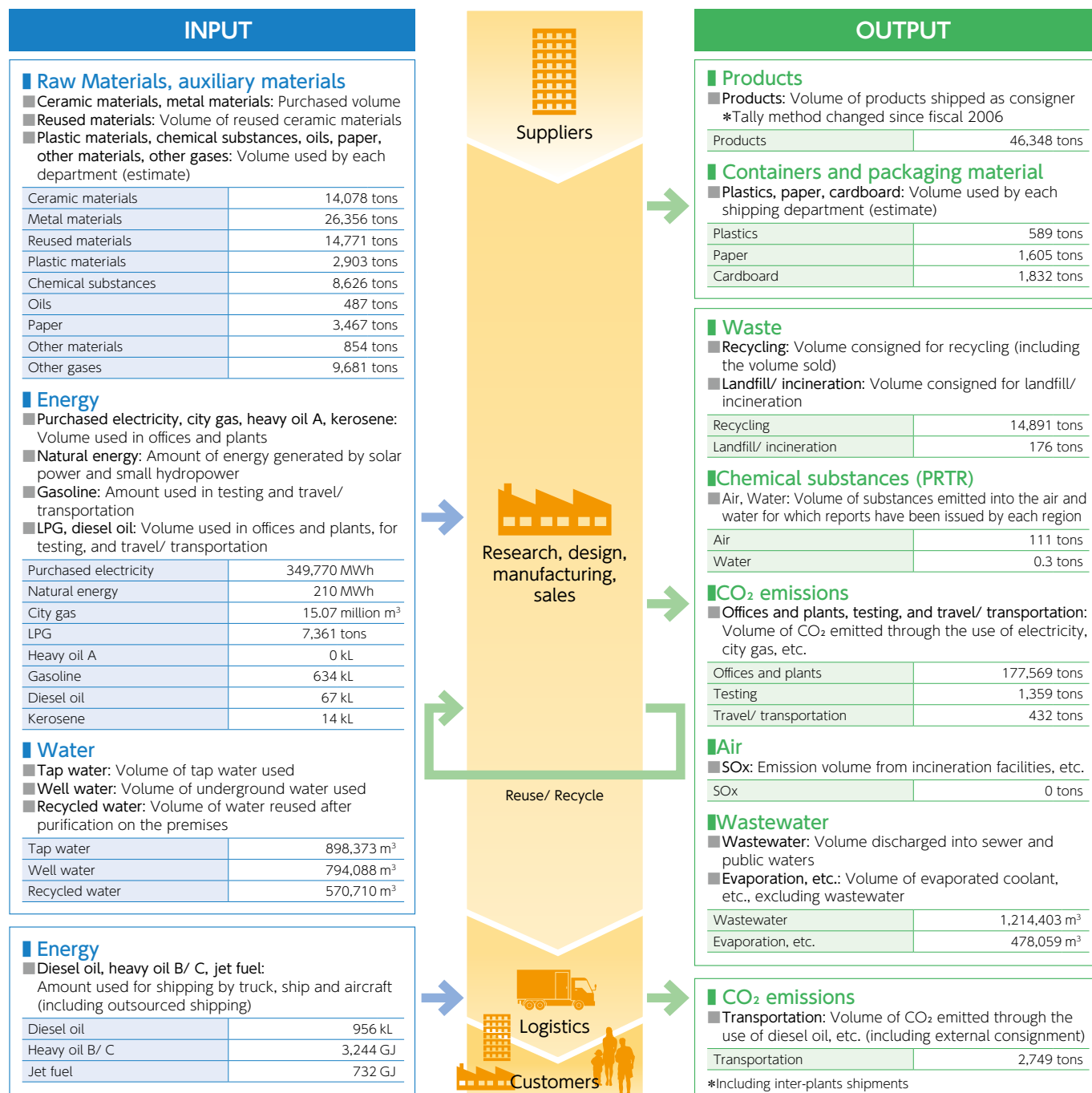
Eco-efficiency (Group)



Environmental Burdens from Business Activities

Material Balance

*Figures indicate performance of NGK SPARK PLUG Group (P33) and domestic sales offices sites combined.



Factors used to calculate CO₂

Japan Auto Parts Industries Association (2001)

	CO ₂ conversion factor
Purchased electricity	0.33kg CO ₂ /kWh
City gas	2.558kg CO ₂ /m ³
LPG	3.007kg CO ₂ /kg
Heavy oil A	2.712kg CO ₂ /L
Kerosene	2.493kg CO ₂ /L

Ordinance guidelines on calculating greenhouse gas emission volumes resulting from the business activities of designated emitters

	CO ₂ conversion factor
Gasoline	2.32kg CO ₂ /L
Diesel oil	2.62kg CO ₂ /L

Calculation of emission volume

For manufacturing sites with no equipment to measure wastewater volumes, the total volume of tap water and well water used is indicated as wastewater.

Alleviating Climate Changes

Fiscal 2011 Topics

- We strove for electricity conservation in response to the disaster.

Basic Philosophy

Major climate change could hinder the establishment of a sustainable society. To contribute to the alleviation of climate change, Eco Vision 2015 sets CO₂ emission reduction targets for long-term efforts led by the Energy Conservation Promotion Office.

VOICE

I believe that the effective utilization of limited resources and the prevention of environmental destruction are our obligations to the next generation. It has been two years since the Energy Conservation Promotion Office was established, and this Office has been participating in the energy conservation activities of many departments. Our key achievements for fiscal 2011 include RHK exhaust heat recovery and review of the general temperature control method; our contribution has resulted in a reduction of 923 tons in CO₂ emissions. Energy conservation activities reduce environmental burdens as well as costs, and therefore, we will continue creating mechanisms and providing support so as to further promote energy conservation activities.

Kiyotaka Ono
General Manager
Energy Conservation Promotion Office

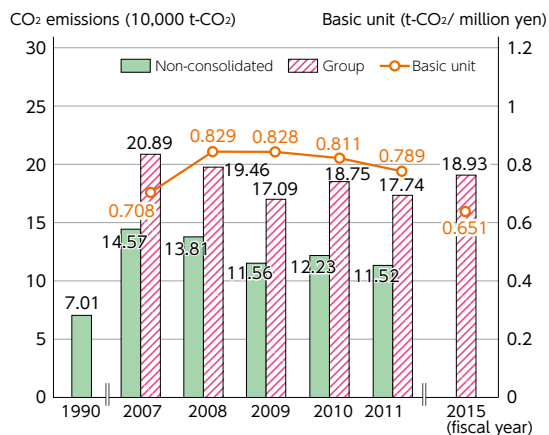


Results of the Fiscal 2011 Targets, and the Fiscal 2012 Targets

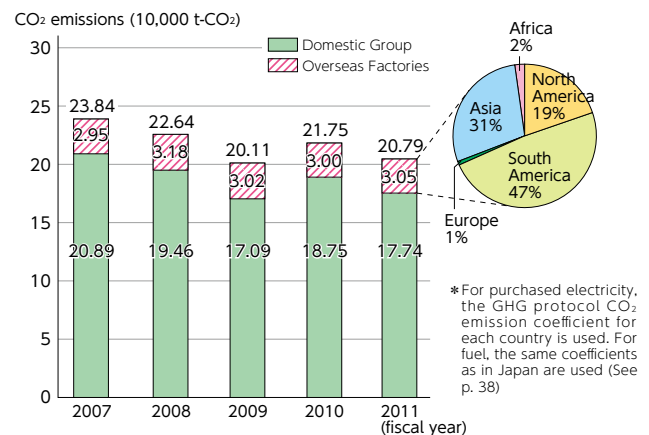
The CO₂ emission volume for fiscal 2011 was 177,400 tons (down 5.4% from previous fiscal year), thus achieving the 2011 target of 186,700 tons. This was due to energy conservation efforts such as exhaust heat recovery, combustion air preheating, and insulation during the manufacturing process, as well as electricity conservation efforts (peak reduction, etc.).

Since it has been difficult to reflect the actual business activities into the reduction results, the evaluation indices that reflect the actual status in a better manner will be used for fiscal 2012; the aim is to achieve emissions of 18.79 tons and emissions per unit of production of 0.748 tons/ million yen.

Transition of Emission Volume of Energy-Origin CO₂ (Offices and Plants)



Trend in CO₂ Emissions (Domestic Group + Overseas Factories)



Act on the Rational Use of Energy and the Law Concerning the Promotion of Measures to Cope with Global Warming

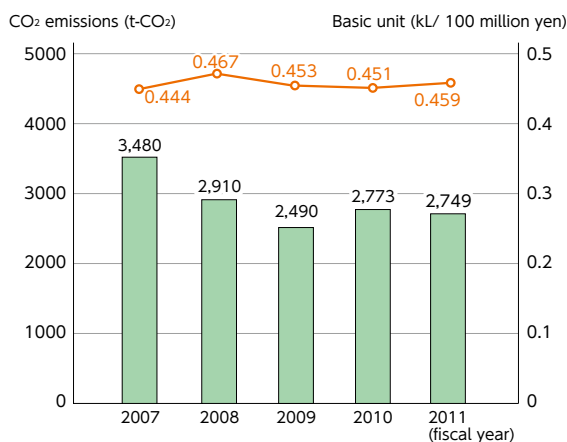
Energy consumption by NGK SPARK PLUG CO., LTD. and three affiliated companies exceed 1,500kl (crude oil equivalent), and have therefore been designated as Specified Business Operators under the Act on the Rational Use of Energy. Each designated company has appointed an Energy Management Control Officer and an Energy Management Planning Promoter to oversee energy conservation.

The emission volume of greenhouse gases excluding energy-origin CO₂ by NGK SPARK PLUG CO., LTD. totaled 617 tons (CO₂ equivalent), representing a 31% decrease from the previous fiscal year. Since it did not reach 3,000 tons, reporting was not required under the Law Concerning the Promotion of Measures to Cope with Global Warming; nevertheless, we will continue to calculate and control our emissions.

Alleviating Climate Changes

Energy Conservation During Transportation

As Specified Consigners under the Act on the Rational Use of Energy, we are making efforts to reduce CO₂ emissions during transportation. The per unit energy consumption was 0.459 kL/ 100 million yen for fiscal 2011; we were unable to reach our goal of 0.426 kL/ 100 million yen. For fiscal 2012, the Logistics Subcommittee established in August 2011 will play a central role in striving to achieve the goal of 0.422 kL/ 100 million yen.

Transition of CO₂ Emissions as Consigner

Electricity Conservation in Response to the Disaster

To lower the peak of electricity use during summertime, electricity was conserved through the improved operation efficiency of air conditioning systems and production facilities, the reduced use of power through energy conservation efforts in offices, and the lowering of the maximum-level electricity use, by adjusting work times.

Use of Natural Energy

We promote the use of solar power, a natural energy source. The Nagoya Plant has three solar power generator units and one solar water heater. The Komaki Plant has a large-scale solar power generator unit that can generate a maximum of 107 kW of electricity. Power generated in fiscal 2011 totaled 164,000 kWh, equivalent to a reduction of 54 tons of CO₂.



Solar panels (Komaki Plant)

Participation in the Lights-Down Campaign

We support and participate every year in the CO₂ Reduction Lights-Down Campaign conducted by the Ministry of the Environment. In fiscal 2011, we turned off the lights of 17 advertising towers and displays from June 22 (summer solstice) to the end of August with the cooperation of our plants, sales offices and dealerships. Additional energy conservation efforts included the lights-down of four advertising towers and displays from March 2011, immediately after the disaster, until the end of January 2012.



Normal



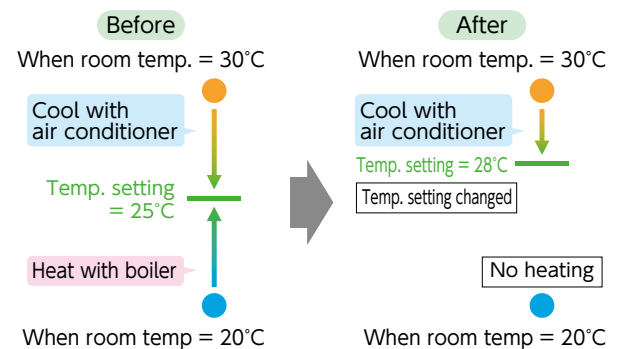
Turned off

PICK UP

Changing the temperature control method - Komaki Plant

The Organic Package Div. of Komaki Plant has been maintaining the temperature of the area with coating lines at 25°C. This meant that when the room temperature was 30°C, air conditioners were used to lower it to 25°C, and when it was 20°C, boilers were used to raise it to 25°C. We focused on this, and considered ways to conserve energy by reducing such temperature controlling without sacrificing product quality.

Specifically, we changed the temperature setting from 25 to 28°C, and stopped heating the room when the room temperature was too low. This resulted in reducing the electricity use by air conditioners as well as reducing gas use by boilers, achieving approximately 520 tons of CO₂ emission reduction per year.



Waste

Fiscal 2011 Topics

- A portion of the coating wastewater treatment has been changed from outsourced to in-house.

Basic Philosophy

The NGK SPARK PLUG Group aims to use resources to the maximum, and therefore works first and foremost to reduce the volume of waste generated, and to recycle what is generated.

Results of the Fiscal 2011 Targets, and the Fiscal 2012 Targets

[Details](#)

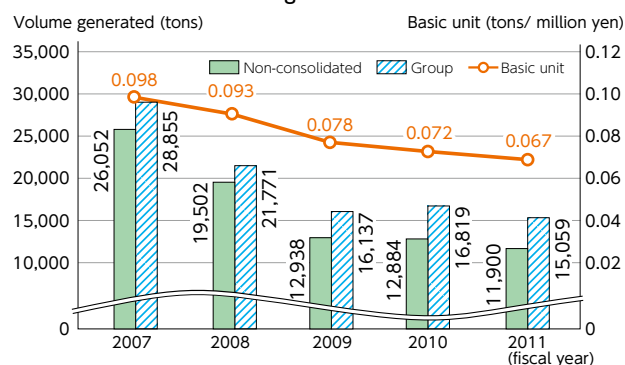
In fiscal 2011, the Group aimed for per unit production of 0.072 tons/ million yen. Reduction efforts resulted in 0.067 tons/ million yen, thus achieving the target.

The total volume of generated waste for fiscal 2011 was 15,059 tons, down 10.5% in comparison with fiscal 2010. The rate of

effective utilization was 98.9%, and we have maintained zero emissions since fiscal 2005.

For fiscal 2012, we aim to further reduce waste, with our target set at per unit production of 0.070 tons/ million yen (a 28.6% reduction compared to 2007).

Trends in volume of waste generated



VOICE

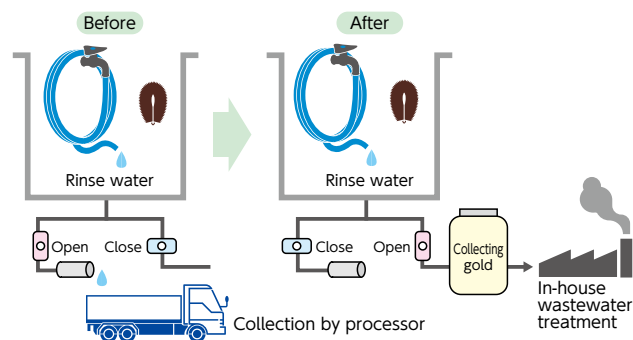
I am in charge of waste management at the Ise Plant Recycling Center. At the base of our activities is the reduction of waste volume, but for waste that is generated, we try to select treatment methods that allow recycling whenever possible. We are constantly aware of the three Rs (Reduce, Reuse, Recycle) whenever we handle waste.



Norio Okumura
Environment & Safety Management Dept.

PICK UP Waste reduction through reviewing the wastewater destination - Komaki Plant

Washing the gold-coating tank generates rinse water. This rinse water contains traces of gold, but it had conventionally been regarded as wastewater, and its collection had been outsourced.



This process has been reviewed; now, the gold is collected within the company, after which the water is treated at a wastewater facility. This resulted in approximately a 40% reduction in waste.

VOICE

This waste reduction effort has been a part of the streamlining project. Reducing fixed costs also resulted in waste reduction, an outcome I am very pleased with. I hope to continue working on projects that contribute to the betterment of the environment.



Takayuki Sakai, Supervisor
Production Dept.
Organic Package Div.

Water Resource

Fiscal 2011 Topics

- The production efficiency of the plating process was improved, resulting in a reduction in water consumption.

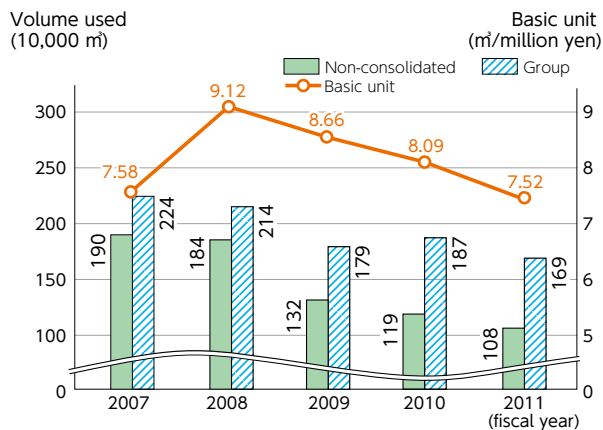
Basic Philosophy

The NGK SPARK PLUG Group recognizes that water is an important resource, and is making efforts to reduce the volume of tap water and well water used in our business activities.

Results of the Fiscal 2011 Targets, and the Fiscal 2012 Targets

The Group aimed for per unit production of 7.77 m³/million yen for fiscal 2011. We achieved an excellent result of 7.52 m³/million yen, far exceeding our target. For fiscal 2012, we hope to achieve per unit production of 8.30 m³/million (9.5% up from 2007) through various reduction measures.

Trends in volume of tap water/well water used



VOICE

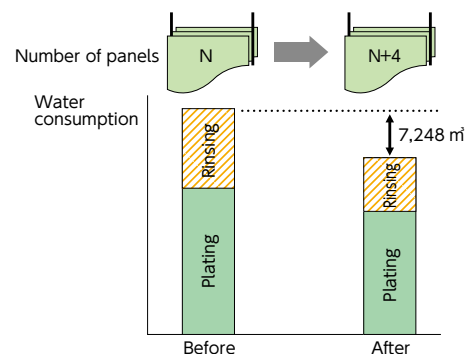
We at the Komaki Plant conserve water on a daily basis. The faucets of our basins are equipped with water-saving packing or foaming caps to control water flow, resulting in a reduction in water consumption of about 40 to 60%. We intend to continue such efforts in order to contribute to water conservation. Our next plan is to look into water-saving toilets, which are recently becoming popular.



Toru Koshibae
Production Support Engineering Dept.

PICK UP Reduction in water consumption through improved production efficiency - NTK Ceramic Co., Ltd.

During the plating process, several panels are hung on a rack for plating. To improve production efficiency, we tried increasing the number of panels hung on each rack during plating, and found that the plating quality remained the same. Therefore, we have now increased the number of panels per rack. This reduced operation time, and water consumption for the plating line and the rinsing unit was reduced by 7,248 m³ per year.



Substances of Environmental Concern

Fiscal 2011 Topics

- The Green Procurement Guidelines were revised, and their scope was enlarged to the entire Group.

Basic Philosophy

We have a three-step management system for handling substances of environmental concern: ① Answering requests from customers, ② Handling within the Group, and ③ Procurement from suppliers. Naturally we ensure compliance with laws and fulfill customer

requests. More than that, we aim to reduce the use and emission of substances of environmental concern so as to minimize their effect on the environment and human health.

Customers

With the reinforcement of regulations on chemical substances contained in products, requests from customers in the automobile, electrical and electronics industry regarding improved compliance are increasing. The REACH Regulation of the EU has triggered an increase in the status of chemical

substances contained in products; we are taking all the appropriate measures including submission of Non-Containing Declarations, IMDS and JGPSSI survey and response tools, submission of various data with AIS, etc., and handling investigations and audits regarding our management systems.

Suppliers

Handling the year-to-year changes of chemical substance regulations requires the procurement of materials with as little environmental burden as possible. It is for this reason that we issue our Green Procurement Guidelines  to request

cooperation from our suppliers, and now, we have revised the Guidelines to serve as the Group policy in further promoting green procurement throughout the entire Group.

■ The green supplier system

We certify suppliers that meet system standards and material standards as green suppliers, and give them priority.

We now have 287 certified suppliers as of the end of fiscal 2011.



Certification

■ Support for our suppliers

We support our suppliers by hosting environmental seminars and helping to establish their environmental management systems. So far, we have received requests from 36 companies, and of those, 34 have acquired ISO 14001 or EcoAction 21 certification. We will continue our support for the two remaining companies in their environmental management system establishment.

■ Certification standards

System standards

- Third-party certification under the environmental management system

Material standards

- Non-containment of designated substances on our prohibited list (Raw materials, components, packaging materials)
- Reporting on containment status of prohibited substances (Facilities, tools)
- Implementing measures to prevent commingling of hazardous materials (Outsourced operations)



Green suppliers

Substances of Environmental Concern

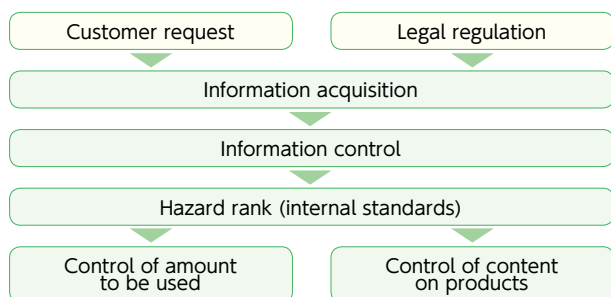
Group

Companies are required to manage chemical substances in an appropriate manner. The entire NGK SPARK PLUG Group is committed to ensuring non-containment management and enhancing the control of usage in plants.

Non-Containment Management for Products

To satisfy customer requests and regulation such as the ELV Directive, the RoHS Directive and the REACH Regulation of the EU, we assign hazard ranks to substances of environmental concern. With handling standards for each rank, we achieve non-containment and thorough management of usage reduction.

Management system



Hazard rank

Hazard rank	Handling standard	Substances covered
Prohibited substances	Use is prohibited.	Substances prohibited from use or strongly restricted by regulations.
Restricted substances	Safer substitutes will be sought, while making efforts to reduce the use of current substances.	Hazard level and toxicity are equivalent to prohibited substances, but an immediate changeover is impossible due to its special characteristics.
Monitored substances	Supplies need to be examined to find existence/non-existence of applicable substances.	Those not prohibited or restricted but that require monitoring.

In-house analysis of substances of environmental concern

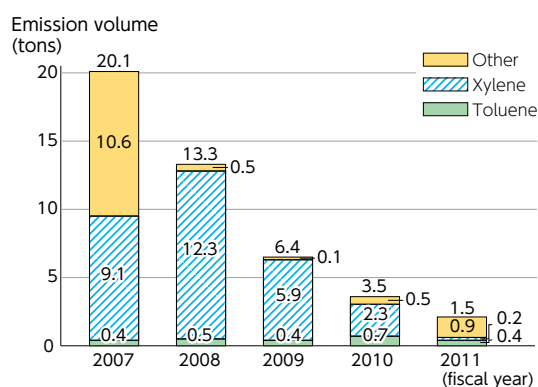
To confirm the containment status of substances of environmental concern in our products, our in-house analysis center conducts a partial analysis of substances of environmental concern contained in products to prevent the release of nonconforming products.

[Details](#)

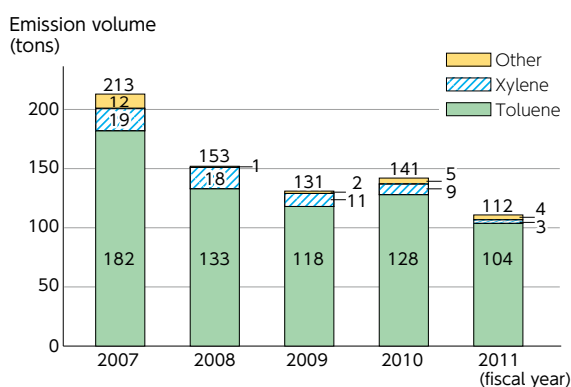
Managing Use in Plants

Our plants aim to reduce emissions of PRTR substances. Eco Vision 2015 aims for emission reduction of 80% from 2007 (43 tons or less).

Emission volume of PRTR substances (non-consolidated)



Emission volumes of PRTR substances (group)



Environmental Risks

Fiscal 2011 Topics

- Measures to prevent chemical substance leakage, such as placing pipes aboveground, are underway.

Environmental Risk Management

Inherent in business activities are various risks including environmental incidents and pollution. NGK SPARK PLUG Group identifies these risks and endeavors to reduce and/or prevent them.

Soil Survey

We clarify our soil surveying method, auditing period, and evaluation standards to prevent soil or underground water pollution. We meet the accounting standards relating to our asset retirement obligations, and comply with the Soil Contamination Countermeasures Act revised in April 2010.

PCB Control

Waste materials containing PCBs are stored at the Nagoya Plant, Komaki Plant and Nittoku Seisakusho Co., Ltd. We will continue to adhere to stringent control procedures until the day that waste containing PCB can be disposed of in a proper manner.

On-site Confirmation of Waste Material Treatment

We regularly visit our waste disposers to confirm that consigned waste materials are being processed in accordance with our agreement. In fiscal 2011, we visited 48 companies.

Preventing Chemical Leaks

To avoid the pollution of soil or water from chemical leaks, we take various measures at our facilities including double-layering storage tanks to prevent leakage and running pipes aboveground for prompt detection of leaks, and conduct regular inspections. We will also simultaneously enhance the operational and management aspects of our chemical substance handling.

Drills for Emergency Situations

We hold regular drills for emergency situations to prepare for unforeseen accidents, etc. Pollution is prevented by projecting possible incidents in each department as well as the impact of such incidents.



Drill on hydrochloric acid leakage
(Miyanojo Plant)

Handling of Asbestos

We have been taking appropriate measures to prevent health hazards from asbestos. All asbestos used in our facilities has been completely removed. Some asbestos is still present in buildings as insulators, and we will continue to adhere to stringent control measures.

Compliance Status

[Details](#)

To ensure compliance with environmental laws and regulations as well as agreements with local municipalities, etc., we set stringent voluntary standards to prevent violations and complaints. In fiscal 2011, there were two cases of legal violations, such as lack of notification stipulated by law, two noise complaints, and one odor complaint. These were handled promptly, alongside measures taken to prevent any recurrence.

Numbers of Violations and Complaints

(cases)

Fiscal year	Violations			Complaints		
	2009	2010	2011	2009	2010	2011
NGK SPARK PLUG CO., LTD.	0	0	1	2	3	2
Affiliates	1*	1	1	2	1	1

* We discovered that there was an unnotified case involving an affiliate (situation remedied) in fiscal 2009, and therefore we scored 1 for violation.

Handling violations and complaints in fiscal 2011

Classification	Plant/Company	Situation	Countermeasure
Violations	Takenami Plant	Did not submit the Status Report on Industrial Waste Control Documentation Issuance, etc., to the prefectural governor.	Submitted the Status Report on Industrial Waste Control Documentation Issuance, etc., to the Gifu Prefecture governor late. Also standardized the procedure to prevent recurrence.
	Nittoku Seisakusho Co., Ltd.	Fluorine Recovery Process Control Documentation was issued upon discarding air conditioner units, but collection certification was not received within 30 days after issuance.	Received the collection certificate.
Complaints (noise)	Komaki Plant	The pressure control relief valve of the cooling water pump was generating a vibrating noise.	The valve was exchanged.
	Komaki Plant	The exhaust fan of the Komaki Plant had deteriorated, generating a vibrating noise.	The exhaust fan was exchanged.
Complaints (odor)	Kamioka Ceramic Co., Ltd.	The exhaust from the dewaxing furnace was generating odor.	The treatment process was reviewed to prevent odor-causing substances from being released into the air.

Environmentally Friendly Products

Fiscal 2011 Topics

- LCA activities have commenced in all divisions.

Basic Philosophy

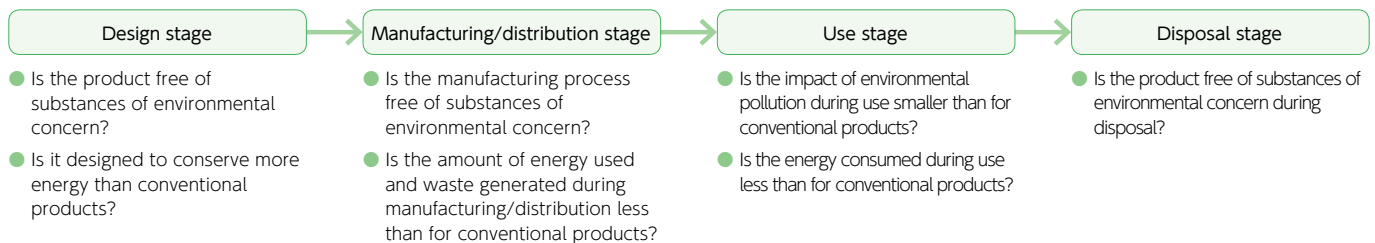
The NGK SPARK PLUG Group aims to contribute to improving the global environment through its products by making efforts to reduce the environmental burden throughout the lifecycle of its products, from raw material procurement to product disposal. Aside from efforts to reduce CO₂ emissions and waste during the

manufacturing and distribution processes, we are also endeavoring to produce environmentally friendly products by controlling the amount of energy involved in using and disposing of the product by customers and ensuring that they do not contain substances of environmental concern.

Product Assessment

To reduce the environmental burden from procuring, using and disposing of raw materials, it is important to predict the environmental impact at the design stage, and to take prompt countermeasures when any negative impact is foreseen. To ensure this, we conduct product assessments when we develop new products or change the specifications of existing products.

During a product assessment, the existence of substances of environmental concern, the amount of energy used, etc. are confirmed at each of the design, manufacturing/distribution, use, and disposal stages. If the assessment determines that there is a significant environmental impact, countermeasures will be taken before development is continued.



Reducing Environmental Burden Throughout the Lifecycle

To reduce the environmental burden throughout the entire lifecycle of a product, we conduct an LCA (life cycle assessment) on our key products.

LCA is a method of providing an objective assessment on the impact on global warming and resource depletion throughout the entire lifecycle of a product. Making a more comprehensive,

scientific and quantitative assessment allows us to clarify present problems and their magnitude, and reflect the results into designs, process, etc. In fiscal 2011, LCA activities began in all divisions.

In the future, we will create a mechanism to promote assessment in our product models so as to utilize the results in our designs.

Communication

Fiscal 2011 Topics

- The CSR Report 2011 and site-specific environmental reports have been issued.
- Local cleaning activities were held at each site.

Basic Philosophy

For The NGK SPARK PLUG Group to continue its business operations, it is essential to improve our coordination with local communities and build trust with society. We feel that the best way to build this trust is to provide information on the Group's environmental activities, and we are endeavoring to disclose information in an accurate and easy-to-understand way to improve communication.

Observing Environmental Activities

We accept plant tours for observation of our environmental efforts and facilities. A deeper understanding of our Group's activities and better communication are achieved by seeing our facilities firsthand and engaging in question and answer sessions. In fiscal 2011, we hosted eight plant tours, with a total of 333 participants.

Conservation of Biodiversity

The NGK SPARK PLUG Group recognizes that biodiversity is essential for a sustainable society, and has established the Biodiversity Action Guidelines in order to reduce the impact of the Group's use of energy and resources, emissions of substances of environmental concern, and other business activities on biodiversity.

Donating to Tree-Planting Activities

Part of the proceeds from the autumn "Change to an Eco-Plug!" campaign held from October to December 2010 was donated through the local forest cooperative to tree-planting activities in Aibetsu-cho in Hokkaido Prefecture. Our donation enabled the planting of 50 seedlings of white birch, Quercus crispula Blume, rowan and other trees.



The tree planting

Report on Environmental Activities

The Group issues a CSR Report (formerly the Environmental & Social Report) and site-specific environmental reports to provide a better understanding of our environmental preservation activities. We will continue to aim for the disclosure of accurate and easy-to-understand information.



CSR Report 2011



Site-specific
environmental reports
(Japanese Only)

Environmental Meeting

We host environmental meetings with local residents as a venue for communication. At these meetings, we explain our daily environmental activities as well as hear opinions and comments from participants on how we can improve things. In fiscal 2011, we hosted 8 such meetings, with a total of 19 participants.



Environmental meeting
(Nansei Ceramic Co., Ltd.)

Local Clean-Up Activities

Details

We regularly hold clean-up activities to preserve the local environment. We also continue to participate in beautifying activities hosted by local municipalities, etc. In fiscal 2011, a total of 1,031 people participated in such activities.



Clean-up activity
(Headquarters and Nagoya Plant)



Message from a Stakeholder

A company's philosophy is reflected in its attitude toward its stakeholders, which includes employees, customers and local residents, and in the outcome of how successfully a relationship of reliance and trust has been built. In the past, the pursuit of profits was the top priority for companies, but these days, the focus has diversified into a variety of fields including environmental conservation, employment policy and health/welfare promotion. It is said that "no good people, no good products." NGK SPARK PLUG CO., LTD. emphasizes human resource development, with the policy of respecting the personality and creativity of individual employees, while promoting the combined efforts of all employees and encouraging them to be ambitious in seeking new social needs, values and targets of higher levels. I empathize with this attitude. Corporate philosophy is also reflected in the company's way of making commitments to society. In our region, NGK SPARK PLUG and the local communities have been strengthening a relationship of mutual reliance through the implementation of a wide array of joint activities, including the 2012 Health, Safety and Environment Conference in which local residents in three neighboring towns visited the company to directly see its activities; a cleaning campaign in which employees of NGK SPARK PLUG participated in cleaning activities for local communities; and other regional events. I am also impressed with the company's dedication to emergency measures for local communities; they have established prescriptions for disaster responses. I hope that NGK SPARK PLUG will continue to grow as a corporate member of our society, while maintaining its transparency to its stakeholders inside and outside the organization.



Kaoru Kobayashi
Chairman
Residents' Association of
Enza-cho, Ise City

Third-Party Review



This CSR Report 2012 has been prepared based on our information disclosure principles, with the policy of ensuring easy understanding for readers and reliability as a report. For us to verify that this Report conforms to this policy, we have asked TÜV Rheinland Japan Ltd. to review the Report. Their review was conducted with the aim of confirming the inclusion of all important information necessary to be communicated to the public, the consistency between disclosed information and source data, and the absence of any inappropriate, misunderstanding-inducing descriptions.

The results of the review are mostly reflected in this Report, where we made some corrections and additions in response to suggestions made by TÜV Rheinland. We continue to make efforts to improve our report by addressing other suggestions that require time-consuming structural improvement and therefore could not be responded to in this Report.



Third Party Review

TÜVRheinland® Precisely Right. Third party verification report for the "NGK Group CSR Report 2012" NGK SPARK PLUG CO., LTD. Mr. Shiroki Odo, President & Chief Executive Officer July 30, 2012 TÜV Rheinland Japan Ltd. Michael Jungstich, President 1. Scope, purpose and subject of verification NGK Spark Plug Co., Ltd. (hereinafter referred to as the organization) has prepared the "NGK Group CSR Report 2012" and the information directly related to the report. TÜV Rheinland Japan Ltd. (hereinafter referred to as the verification body) has been commissioned as an independent third party to implement a specific and agreed-upon verification process with the purpose to confirm: • Rational calculation methods and the reliability of environmental reporting, performance indicators and accounting information as well as the validity of statement including social reporting • Completeness of the report disclosing important environmental issues • Reporting including social activity without intention to mislead readers The purpose of this verification is to report the results including verification opinions. 2. Verification process The following verification process has been performed based on the agreement with the organization. (1) Outline of the environmental performance indicators: Process overview to figure out the environmental performance indicators and items for data collection were learned and examined. (2) Process of data collection, calculation and reporting: As basic information pertaining to environmental performance indicators and environmental accounting indicators, the data collection process and the calculation method were examined. (3) Accuracy of data: For the environmental performance indicators and the environmental accounting indicators, the accuracy of data and reliability of calculations have been assessed by comparing selected data with basic information, and confirming their consistency. (4) Correctness of reported information and completeness of important issues: Information indicated in the report has been confirmed by interviews with responsible persons, on-site visit and comparison between internal and external information. Our verification process includes document verification of the organization's draft report, on-site verification for overall data aggregation, verification of contents of the report, verification of sampled-site data aggregation process and confirmation of the organization's final draft that includes corrective action implementation. The detail of our verification process including required corrective actions, implemented corrective actions by the organization, and reporting is disclosed in our home page (http://www.tuv.com/jp). As the result of above-mentioned processes, the verification body judged that it had obtained reasonable information to conclude: Ministry of Environment's "Environmental Reporting Guidelines, and Environmental Reporting Standard", and GR's "Sustainability Reporting Guidelines" were considered during the verification process however, the statement does not imply certification or compliance with these guidelines. * Visited site for the verification: Headquarters, Headquarters plant and Komaki Plant and Ise Plant * Sampled sites: Headquarters and Headquarters plant (Focal points of verification: data aggregation in PRTR and CO2) 3. Conclusion The verification process has been performed as planned, and it was confirmed that corrective actions requested during the verification have been properly implemented. As a result, the audit team concludes that "NGK Group CSR Report 2012" and relevant information cover and correctly provide important environmental information in accordance with the Ministry of Environment's "Environmental Reporting Guidelines."	TÜVRheinland® Precisely Right. 4. Verification opinion • General evaluation • The organization has changed its editorial policy of the CSR report since this year to disclose entire contents of the report on its website. Although a report booklet is still available, it is provided as the report summary. By taking advantage of the website report, it is expected that the organization will disclose a wide variety of information more actively through the report to further meet the needs of readers. In order to do so, continual improvement of the report is essential from both perspectives: contents and the method of disclosure, so that diverse information of the report could satisfy a wide range of people from ordinary readers to specialists in both quality and quantity and provide clear and easy-to-understand a variety of topics in the CSR report. Further enhancement in the future can be expected as awareness of the organization for continual improvement toward website disclosure can be seen in improvements including a glossary with a new feature added to the website report from this report by making effective use of characteristics of PDF. While the organization could take advantage of shifting to the website report, it is necessary to deal with disadvantage of that. It is hoped that the organization could respond to those who have been accustomed to reading a booklet report for a long time so they can smoothly take the website report. • Environmental activities • The organization has been steadily enhancing its process of aggregating environmental performance data. The report of CO2 emissions started to be issued on a monthly basis after collecting performance of individual divisions, which enables the organization to well understand the status of energy efficiency improvement activity taken by the entire group of the organization. However, continual improvement should be done further so that the organization can get the data aggregation results in a timely manner and swiftly utilize it for check and action of PDCA cycle. Therefore, further enhancement would be needed to reduce the time for data aggregation as well as for verifying the results. Regarding the data collection method of PRTR substances, it is carried out in line with the on-site process and the up-to-date status is reported, confirmation of data collection should be partly necessary. Water consumption data has been continuously and accurately collected and managed with software. Promising technology essential to such an area of environmental management has been continuously focused and described in the special feature 1 and 2, which makes us expect to learn about the organization's eco-friendly products and R&D. Including this representative example, further enhancement can be made in describing environmental performance of the products continuously and systematically by including the vision, advancedness and recyclability. The organization has renewed its report as the "CSR report" since last year. As a global company that should provide environmental information as well as information of global and social initiatives, one of challenges for the organization is how to quickly build a system that collects data from overseas subsidiaries as implementation of environmental activities in accordance with the environmental policy by global and localized management is becoming more and more vital. Regarding a remaining issue of "shift to achievement from process" in controlling target, the "Eco Vision 2015" includes representative examples such as positive challenges and improvement of initiatives for the challenges. However, there are some items whose targets have already achieved by the efforts or others resulting in little progress. It is hoped that the organization will appropriately review the targets and initiatives on an annual basis. • Social activities • Management related articles including corporate governance describe initiatives to strengthen the control and supervision of the entire organization by the "divisional system" that enables to make quick decisions and efficient individual business operations, and by the "horizontal management" to achieve well balanced growth of the company. It is expected that the organization will further enhance its corporate governance as the base of CSR management by the executive corporate officer system which was introduced as of April 1st this year. Moreover, attitude of the organization trying to enrich contents including relationship with employees such as initiatives for occupational health and safety, voice of employees and the like is valuable. Given the higher proportion of exports which is the characteristics of the organization, it is also hoped that such an attitude trying to achieve CSR management appropriate for regions where the organization carries out its business operations, while understanding its role there, will be reflected on the report. • Environmental accounting • Attitude of the organization toward disclosure of the environmental accounting has been well shown by the chart for environmental conservation cost and conservation effects in both amount and quantity, and the 5-year trend graph and eco-efficiency (environmental efficiency). Accumulated experience and know-how in data aggregation process is utilized and a system that can manage environmental data related items without missing is expected to achieve. It would be a good time to consider rebuilding the framework of environmental accounting for further advancement as new items surrounding environmental management such as purchasing system of renewable energy start gain more attention, and revised part of "Environmental Reporting Guidelines 2012" includes such a perspective of "linking between environmental management information and business activity/financial information".
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Glossary

Page of appearance	Term	Definition/explanation
4	ROE	ROE is one indicator of a company's profitability. ROE reveals how effectively shareholder equity is being used; higher ROE means higher profitability. [ROE = Net Income / Shareholders' Equity]
6	BCP	Business Continuity Plan. A plan of action to be taken by a company when an emergency situation arises, such as a major disaster or a large-scale accident, to ensure business continuity at a certain level, or if suspended, to realize quick recovery.
6	Compliance	When a company, as a member of society, fulfills its corporate responsibility by enhancing its corporate ethics, and by understanding the spirit and the purport of and complying with laws and regulations, international rules, social norms, and various in-house regulations.
6	Risk Management	Activities to systematically manage various risks related to business in corporate management. Specifically, activities to prevent risk occurrence, or reduce the damage incurred when a risk arises.
7	On-time delivery	Delivering orders on the deadline specified by the client.
9	Three-way catalyst	A device for cleansing harmful substances contained in gasoline-engine automobile exhaust (carbon monoxide (CO), hydrocarbons (HC) and nitrogen oxides (NOx)) through oxidation and conversion.
12	CSR	Corporate Social Responsibility.
12	CSR procurement	CSR procurement is a continuous purchasing and procurement practice, requiring suppliers to comply with procurement criteria in terms of social responsibility activities. The CSR procurement criteria include human rights, work conditions, as well as workplace safety and health, etc.
14	Authorized Exporters' Program	Under this system, customs approves exporters who are excellent in legal compliance as authorized exporters, and gives them preferential treatment. This system is intended to speed up customs clearance procedures and strengthen security measures. Since the approved enterprises can proceed through customs clearance procedures more speedily and reliably, they can also expect shorter lead-times and reduced logistical costs.
15	Smart device	Multi-function information processing terminals that can be used for many purposes, such as smart phones and tablets.
15	Act on the Protection of Personal Information	An act on appropriate handling of personal information. The act prohibits using personal information about an individual for improper purposes without consent of the individual.
15	Unfair Competition Prevention Act	This law is intended to ensure fair competition among business operators. Under this law, operators' business reputations and confidentiality are protected. The law prohibits acts of illegally acquiring, using or disclosing trade secrets.
16	BIA	Business Impact Analysis. Quantitative and qualitative analysis and evaluation of the impact when business is suspended due to unforeseen circumstances. The first and essential step in devising the BCP.
17	Corporate governance	Refers to the process or systems to ensure that a company is managed by the business operator in an optimal and sound manner.
17	Corporate officer system	The operating officer system clearly divides and defines the roles of directors who handle management, and operating officers who execute operations.

Page of appearance	Term	Definition/explanation
17	Internal Control Report System	In 2006, the former Securities and Exchange Act was revised and renamed the Financial Instruments and Exchange Act. Under the revised act, listed companies are required to submit internal control reports every fiscal year, to be subject to audits by certified public accountants or auditing firms, in order to improve the trustworthiness of financial reporting.
20	QC Circle Activities	QC stands for quality control. Small groups are formed within the workplace to encourage autonomous handling of such issues as safety measures, reduction of faulty products, as well as quality improvement and quality control of products.
20	TQM	Total Quality Management is an operational method and management technique that contributes to the improvement of operational quality in an enterprise.
22	FTSE4Good Index Series	A responsible investment index developed and managed by the FTSE Group (UK). Evaluation criteria for selecting a member company include environmental issues, human rights, supply chain labor standards, bribery prevention, climate change, etc.
22	IR activities	Investor Relations involve communicating detailed information about our management, finances and results.
22	SRI	Social Responsibility Investment refers to a type of investment approach. Under SRI, investors select a company they would like to invest in by not only analyzing a company in terms of its financial aspects such as profitability and growth potential, but also comprehensively evaluating the company based on its environmental efforts/ social contribution, such as its compliance with laws & regulations, response to employment conditions and human rights problems, and contribution to society/local communities.
27	JISHA OSHMS Standards	Standards established and published by JISHA (Japan Industrial Safety and Health Association). The standards determine whether OSHMS is appropriately introduced based on the Occupational Safety and Health Management System of the Ministry of Health, Labor and Welfare, and whether the occupational safety and health standards are being appropriately implemented to improve gradually.
27	Frequency Rate	The frequency rate of accidents. Calculated with the following formula. [Frequency Rate = (Number of Accidents / Actual Hours of Extended Labor) x 1 million]
28	Risk Assessment	Method to detect and evaluate potential dangers and hazards in a worksite, and eliminate/reduce them.
29	KYT	Danger anticipation training (stands for Kiken Yochi Training). Training conducted for the purpose of enhancing receptivity to dangers by sharing potential dangers within the workplace.
29	WBGT	WBGT (West-Bulb Globe Temperature), a practical index for evaluating heat effect on humans, is used to help prevent heat stroke in a hot work environment or in sports activities. The Ministry of the Environment calls the index the "Heat Index."
29	Working Environment Measurement	To protect the health of laborers and provide a suitable working environment, working environment measurement is conducted in terms of the level of harmful factors existing in the work environment and to what extent workers are exposed to such harmful factors. The results are evaluated and classified into the first, second, or third category.
29	Industrial physician	A doctor who is involved in managing the health of laborers in workplaces. The Industrial Safety and Health Act mandates companies constantly employing 50 workers or more in the workplace to hire an industrial physician.



Glossary

Page of appearance	Term	Definition/explanation
29	Hiyari Hatto	Events that fortunately did not, but could have turned into a major accident.
32	TABLE FOR TWO	Purchasing of the targeted low-calorie meal results in a 20 yen donation per meal to school lunches for children in developing countries (which costs 20 yen per meal). In other words, buying one meal for oneself results in the donation of one meal to a developing country. Conducted by TABLE FOR TWO International, a specified non-profit organization.
32	Tag rugby	A safer version of rugby, having a "no physical contact (such as tackling) rule"
32	Plastic bottle cap collection	860 bottle caps equal one polio vaccination. Conducted by Ecocap Movement, a specified non-profit organization.
34	LCA	Life Cycle Assessment. Method for quantitative and objective assessment of the environmental impact from all steps throughout the entire lifecycle of a product, including sourcing the raw materials, manufacturing, distribution, disposal, and recycling.
34	PRTR substances	Chemical substances designated in the Act on Confirmation, etc., of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof. This Act stipulates a system of grasping and notifying the amount of specific chemical substances released into the environment.
34	VOC	Volatile Organic Compounds. The source of photochemical oxidants and suspended particulates that pollute the atmosphere.
34	Biodiversity	The existence and maintenance of diversity in ecosystems, species and genes.
34	Material Flow Cost Accounting	Abbreviated as MFCA. Method of identifying costs by determining material costs, processing costs, and depreciation and amortization incurred by materials and energy losses (defective products, etc.) during production processes.
34	Global warming	A phenomenon where the average global temperature is increasing due to higher concentration of greenhouse gases that trap heat in the atmosphere and heat the surface of the Earth.
36	ISO14001	An international standard for environmental management systems. Business sites that have established systems in accordance with the standard can receive certification from an external organization.
37	Eco-efficiency	Index on rate of economic value against environmental burden accompanying business activities. The larger the figure, the better. [Eco-efficiency = Net sales / Environmental burden] *Due to changes in the main system, the numerator has been changed from added-value production to net sales.
39	Greenhouse gases	Gases that cause global warming. The Kyoto Protocol designates carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.
39	Act on the Rational Use of Energy	Established in 1979, triggered by the oil crisis. Measures are stipulated for four categories of factories, etc.: transportation, buildings, and machinery and equipment. Amendment in 2008 changed the base of the control system for energy management for factories, etc. from factories/business sites to business operators (companies). Those consuming 1,500 kL (crude oil equivalent) or more of energy are designated as Specified Business Operators, and are required to appoint an Energy Management Control Officer, make basic unit improvements to an annual average of 1% per year.
39	Law Concerning the Promotion of the Measures to Cope with Global Warming	Under the System for Greenhouse Gases Computation, Reporting and Publication, businesses emitting 3,000 tons (CO ₂ equivalent) or more of greenhouse gases are required to report their emission volumes.

Page of appearance	Term	Definition/explanation
40	Natural energy	Energy obtained from sunlight, solar heat, wind, water, biomass, tide, geothermal heat, snow/ice energy, etc.
41	Zero Emissions	As defined by this Company, when the effective utilization rate of industrial waste and general waste from business activities is 98% or higher. [Effective utilization rate = (reuse + recycle) / (reuse + recycle + landfill and incineration) ≥ 98%]
41	Effective Utilization	As defined by this Company, identifying value as a resource, reusing or recycling (including heat recovery) generated waste. Also includes selling the resulting valuable resources.
43	AIS	Article Information Sheet provided JAMP (Joint Article Management Promotion Consortium), used to convey information on chemical substances contained in products.
43	IMDS	International Material Data System that collects information on materials used and substances contained in approximately 30,000 automobile components.
43	JGPSSI	Japan Green Procurement Survey Standardization Initiative. A council comprising voluntary electrical and electronic equipment manufacturers aiming to share surveys on chemical substances contained in components and materials.
43	REACH Regulation	Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals. It is a comprehensive chemicals regulation for manufactured or imported substances and substances contained in products, effective from 2007 in the EU.
43	EcoAction 21	An environmental management system. This system is designed by the Ministry of the Environment for small to medium businesses to provide ISO 14001 accreditation at a lower cost as well as inspection/consultation.
44	ELV Directive	End-of-Life Vehicle Directive. A directive stipulating the recycling rate of end-of-life vehicles and regulated substances, effective from 2002 in the EU.
44	RoHS Directive	Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment. Became effective in 2006 in the EU.
45	PCB	Polychlorinated Biphenyl. Was widely used as insulating oil and for other purposes due to its high insulating ability and chemical stability, but being highly toxic to people, its production and use is now prohibited.
45	Asbestos	A fibrous mineral that had been widely used as an insulator. Inhalation may cause lung cancer or mesothelioma tumors.
45	Accounting standards relating to asset retirement obligations	Upon disposing of tangible fixed assets such as buildings, it is now mandatory for items which the law requires to be removed to be accounted for as liabilities. Examples include expenses for the treatment of asbestos, soil surveys, and decontamination.
45	Soil Contamination Countermeasures Act	The purpose of this act is to apprehend situations of soil contamination and prevent the contamination having a harmful effect on human health. The Act underwent substantial revision in April 2010 with additional provisions regarding the apprehension of situations and actions to be taken, including a requirement to notify changes in the character of land of 3,000 m ² or more in area.
47	Site-specific environmental reports	By-company/plant reports on environmental preservation activities. Issued by four plants of NGK SPARK PLUG CO., LTD. and eight affiliates (excluding Nittoku Alfa Service Co., Ltd. and Nittoku Unyu Co., Ltd.).



Questionnaire Results

Thank you very much for participating in the questionnaire on the Environmental & Social Report 2011, issued in fiscal 2011. After reviewing the comments and opinions we received, we have carefully selected information to be included in this report.

	External stakeholders	Internal stakeholders (employees)
Q1 Before reading our CSR Report 2011, how much did you know about NGK SPARK PLUG Group's CSR activities?		
Q2 How did you find our CSR Report 2011?		
Q3 Please check the box or boxes, when you find topics particularly interesting. Please fill in a "O" on good topics, and fill in a "x" on no-good topics, for as many topics as you like.	< Top 3 > - Message from the President [Feature article 1] Response to major disasters [Feature article 2] Lineup of hydrogen energy products < Top 4 (ranked by # of O - # of x) > - Message from the President [Feature article 1] Response to major disasters [Feature article 2] Lineup of hydrogen energy products	< Top 3 > - Message from the President [Feature article 1] Response to major disasters [Feature article 2] Lineup of hydrogen energy products < Top 4 (ranked by # of O - # of x) > - Message from the President [Feature article 1] Response to major disasters [Feature article 2] Lineup of hydrogen energy products
Q4 Please check the box or boxes that best describe your situation and position.		
Q5 If you have any other comments, requests or themes you would like to know regarding our CSR activities, please feel free to write in the space below.	- Want to know details about NGK SPARK PLUG's technologies and products contributing to environmental conservation. (Answer) Feature article 2 in this CSR Report 2012 details our products that contribute to the global environment and green society. - Want NGK SPARK PLUG to strategically incorporate its CSR activities in management and administrative agenda to ensure these activities directly contribute to business performance. (Answer) We will make further efforts to ensure that our CSR activities contribute toward realizing our corporate policy and the enhancement of our corporate value.	- Want more details in the "Management" section of the Report. (Answer) We have increased the number of pages devoted to the "Management" section, providing more details about our activities. - Want to have feedback from our stakeholders outside the company on our CSR activities. (Answer) We will send more CSR information to employees including feedback from our stakeholders outside the company.

Request for participation in the questionnaire survey

Thank you for reading our CSR Report from cover to cover.
Please help us to continue improving the content by filling in the questionnaire.

<Handling of personal information>

The personal information you enter will be used solely for the purpose of sending you the report for the next fiscal year.

When tallying and publicizing the results of the questionnaire, we will do so in a way that does not identify you through your personal information.

NGK SPARK PLUG CO., LTD.

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