



Contact

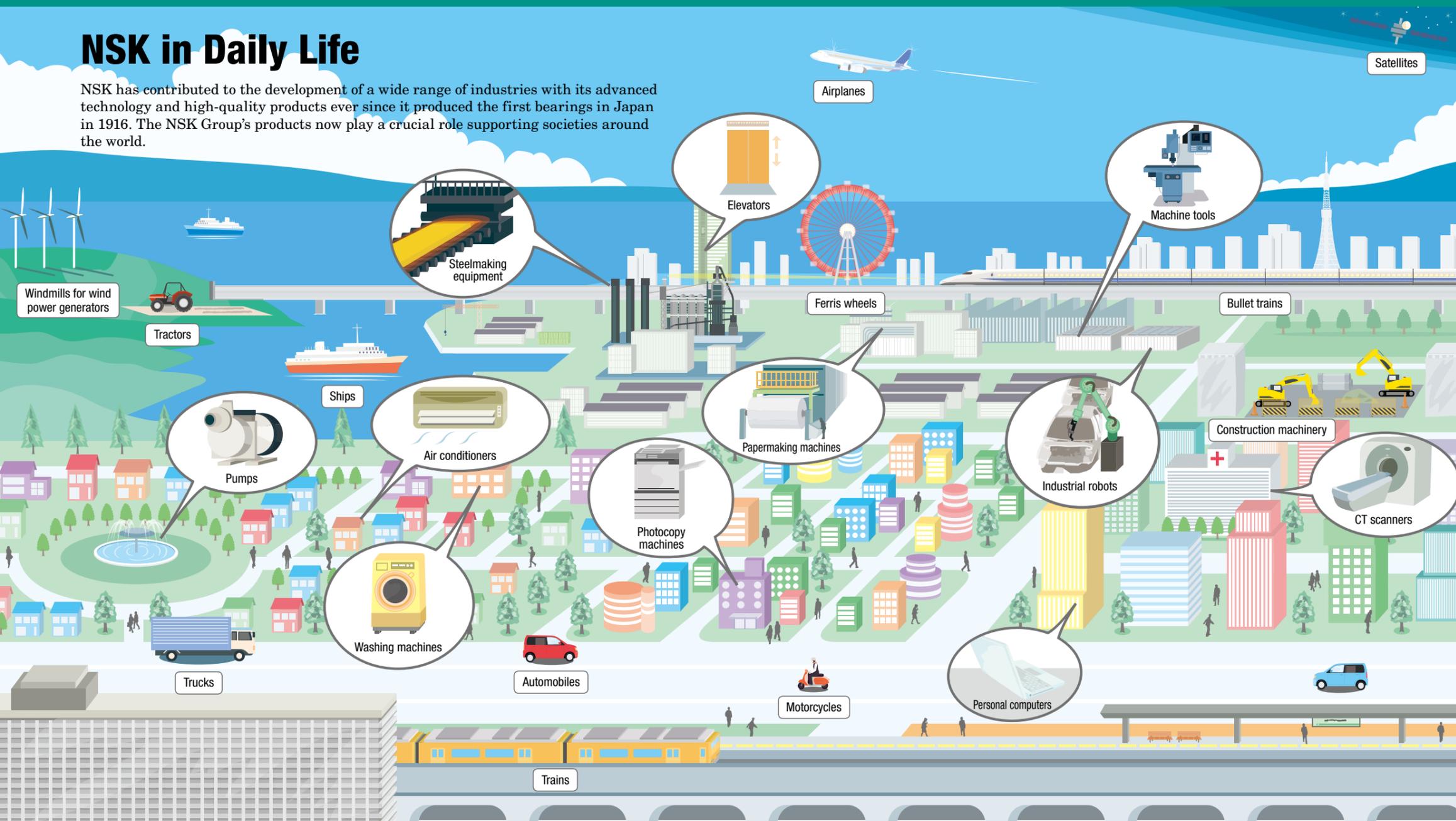
IR & CSR Office, NSK Ltd.
Nissei Bldg., 1-6-3 Ohsaki, Shinagawa-ku, Tokyo 141-8560, Japan
Tel: +81-3-3779-7400 Fax: +81-3-3779-8906
E-mail: csr-report@nsk.com

Date of Issue
November 2010 (previous report, *CSR Report 2009*, issued September 2009;
next report scheduled for September 2011)



NSK in Daily Life

NSK has contributed to the development of a wide range of industries with its advanced technology and high-quality products ever since it produced the first bearings in Japan in 1916. The NSK Group's products now play a crucial role supporting societies around the world.



NSK CSR Report 2010

Contents

- Special Article: NSK Strategy
 - Energy Conservation 4
 - Increasing Use of Renewable Energy Sources 6
 - Localizing Business 8
- Message from the President 10
- The NSK Group's CSR 12
- Management Structure Supporting Sustainable Growth 13
- Creating Quality to Earn the Confidence of Society 16
- Environmental Management 20
- Creating Environmentally Friendly Products 22
- Global Warming Countermeasures 24
- Measures for Resource Conservation and Recycling 28
- Reducing Use of Environmentally Harmful Substances 30
- Creating Dynamic Workplaces 32
- Working with Local Communities Education Support for Future Generations 34
- Fiscal 2009 CSR Activity Performance and Fiscal 2010 Targets 36
- Initiatives at Business Sites 38
- Third-Party Opinion 39
- Our CSR is ... Corporate Overview 40

Introduction

The NSK Group interprets corporate social responsibility (CSR) as "activities undertaken to ensure the sustainable growth of society and the NSK Group, while meeting the expectations of a wide array of interested people through corporate activities." This report outlines the NSK Group's daily operations and how they support societies around the world, with a special focus on the work done by individual employees.

Editorial Policy: The aim of this publication is to help as many stakeholders as possible gain a deeper understanding of the activities of the NSK Group. Priority is placed on presenting information which is considered of most interest to stakeholders or which the Group considers important, and an effort has been made to make the content highly accessible.

Reference Data Published on NSK's Website: More information and reference data are published on NSK's website. For more information and reference data related to topics on pages with a **WEB** mark in this report, please visit www.nsk.com > Sustainability > CSR Reports.

Period of Coverage: April 2009 to March 2010.

Referenced Guidelines: *Sustainability Reporting Guidelines* (third edition) by the Global Reporting Initiative (GRI) and *Environmental Reporting Guidelines* (2007 edition) by the Ministry of the Environment of Japan.

Scope of Coverage: The report covers all NSK Group sites and plants, both in and outside Japan. For data and information that differs from the scope of coverage above, the scope is separately defined.

NSK Group Product Areas

Industrial Machinery Bearings

Bearings reduce friction in the rotating parts of machinery and enable smooth rotation. NSK's bearings are used in a range of products and machines, including home appliances such as vacuum cleaners, railway vehicles such as bullet trains, steelmaking equipment, wind turbines for power generation, large industrial machinery, airplanes, and satellites.



Bearings used in steelmaking equipment Bearings used in wind turbines

Precision Machinery and Parts

The NSK Group's precision machinery and parts are the core components in the machine tools and industrial robots used to manufacture automobiles, personal computers, and other products. They are also found in equipment used to produce semiconductors and in injection molding machines. The NSK Group's precision machinery and parts play a crucial role on the front-line of manufacturing.



Ball screws MEGATORQUE MOTOR™

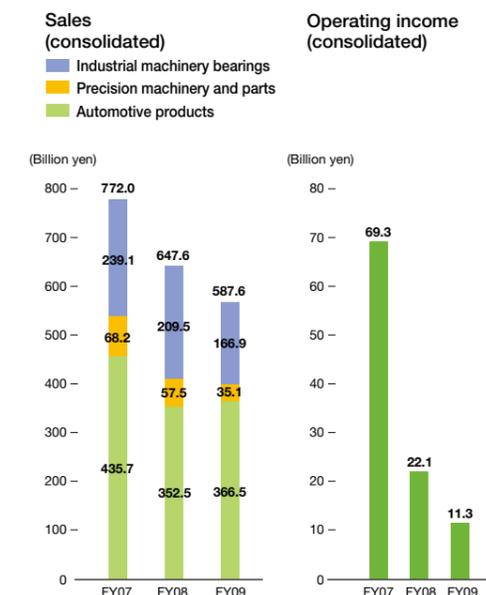
Automotive Products

The NSK Group manufactures a range of products that facilitate moving forward, turning, and stopping in automobiles. The Group produces a variety of automotive bearings used in the drive parts that transmit the engine's rotational force to the wheels, as well as electric power steering systems (EPS). In this way, the NSK Group supports automobile safety, comfort, and environmental performance.



Hub unit bearings with built-in ABS sensors Electric power steering systems

Sales/Operating Income



Do you remember when the eco-car was a rarity? Not any more.

The pursuit of energy efficiency has become common practice now—not only in cars and consumer electronics, but in factory equipment, too. Almost everyone today agrees that we all have to work together to build a sustainable world where people can prosper while still preserving the natural environment. The universal mantra now is that all machinery and devices have to become more energy efficient. This cannot happen, however, unless new technologies are developed, existing technologies are improved, and both are shared with the world.



Sustainability Goal

NSK Strategy

Dream

Make the Eco-car the Usual Car



Automakers have been working for some time now to make hybrid vehicles the mainstream around the world. To achieve this, they have to create cars that anyone would want to buy—cars that are appealing not only for their fuel economy, but also for their design, performance, and price. So the automakers expect parts suppliers to develop cutting-edge auto parts that deliver not only better fuel economy, but also the improved production efficiency required to scale up production to provide the world with a stable and plentiful supply of affordable, high-performance eco-cars.

Breaking Technical Barriers to Realize Energy Savings



A new hybrid model released in 2009 use advanced bearings engineered by NSK. Complex mechanisms need to be made as small and light as possible in order to make hybrid car parts such as the engine, electric motors, and generators compact. One potential way of achieving this is to use thin-walled bearings with relatively large diameters and small cross-sectional areas in transmissions, where such bearings have not typically been used. However, there are problems with this approach. Larger bearing diameters cause greater rotational torque, which causes fuel economy to suffer. And processing the parts for bearings with small cross-sectional areas is also difficult, making efficient production a challenge. NSK found a way to overcome all the technical challenges to provide an outstanding new solution.



Yuunosuke Yoshida
Eastern Japan Automotive
Department 1, NSK Ltd.

Breaking Organizational Barriers to Find New Solutions

Our sales staff solicited customers' evaluation of prototypes and descriptions of exactly what sort of performance they hoped for in newly developed products. The salespeople then promptly and accurately communicated this information to all the relevant departments in NSK. Teams formed to discuss the issues in depth and detail, with development, manufacturing, and sales staff uniting to meet the goals and deadlines for their respective tasks—all to find a way to deliver the demanding performance required by customers. Thanks to our teamwork, we reduced torque to a level previously thought practically impossible while simultaneously improving mass-production efficiency, and NSK won the order.



Hiroyuki Marumoto
Manufacturing Engineering
Department, Fukushima
Plant, NSK Ltd.

Breaking Production Efficiency Barriers

Thin-walled parts deform easily, so ordinarily they must be processed slowly. This obviously creates issues with rapid mass production. Our heat treatment, grinding, and assembly engineers took a close look at all the challenges involved and, one by one, took many small steps to improve the processing techniques. We really pushed the plant's capacities to the limit. We took our results to the development and sales teams and further optimized the design to achieve a balance between ease of processing and high performance. Together, we overcame the production efficiency barrier.

Support Tomorrow's Cars for Tomorrow's World



The automotive lifestyles of the future will no doubt involve highly evolved cars with outstanding environmental performance, safety, and comfort. NSK is determined to continue to push the frontiers of technology and quality in order to meet the expectations of customers and the broader society.

Estimated CO₂ Reduction Effect

Some 100 to 150 bearings are used in an automobile. A pair of new bearings developed by NSK has been incorporated into the transmission of a new hybrid car model. These bearings reduce the lubrication oil agitation resistance during rotation. NSK estimates that this improvement reduces annual CO₂ emissions by about one kg compared to older hybrid models. In just the first year using the nearly 280,000 new hybrid vehicles purchased in Japan in fiscal 2009, the CO₂ reduction effect from these bearings alone will be equivalent to eliminating the annual emissions of about 170 ordinary gas-powered passenger cars. (See page 23 for more information.)

■ Agitation during rotation
Less lubricant (red) is splashed, and so resistance is also lower in the part that uses the newly developed product



Conventional product

New developed product



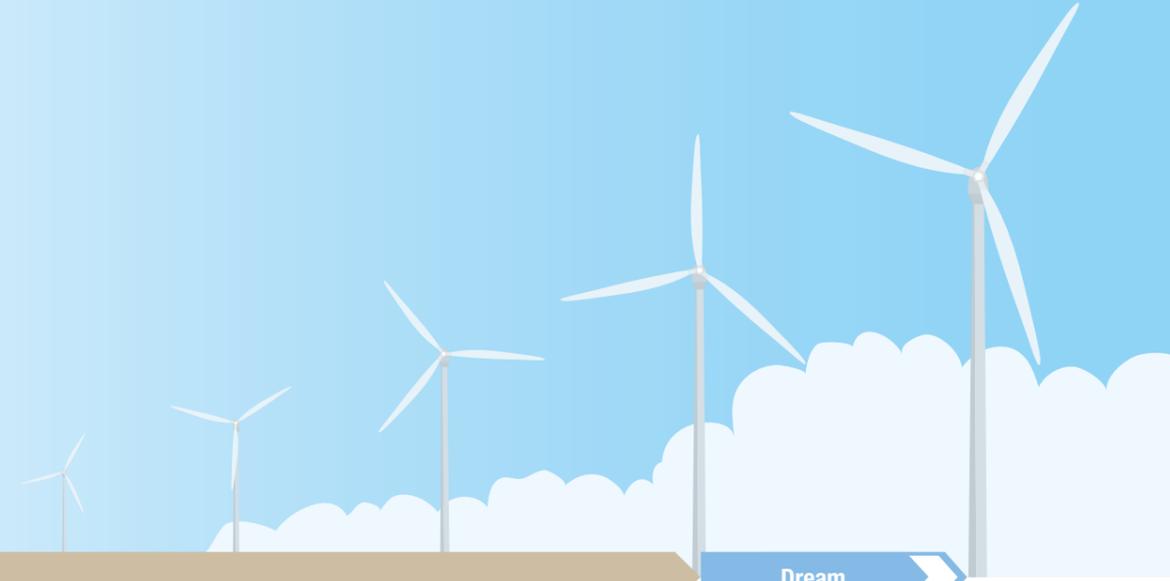
Low-torque ball bearing for hybrid vehicles



Special Article 2

Are you worried that the world's energy supplies will run out?

Today, there is more and more hope that renewable energies like wind and solar power can help in the fight against climate change. Even when used to generate electricity, renewable energy sources do not produce CO₂ emissions the way petroleum oil, coal, and other fossil fuels do. Best of all, no one has to worry about things like wind and sunlight running out. But some challenges remain: we have to raise power generation efficiency and reduce costs if we really want to make the shift to nature's renewable energy.



Sustainability Goal

NSK Strategy

Dream

Make Renewable Energy Everyday Energy



In recent years, wind turbines, newly developed machines for generating renewable energy, are becoming bigger and bigger in a drive to increase generation efficiency. Today, there are turbines with rotor diameters exceeding 120 meters. Since wind turbines represent a new technological field, there is little experience with operating them over long periods of time. Even so, these giant machines must reliably and continuously rotate for years without breaking, despite rain, wind, heat, cold, and storms. And this cannot happen unless turbine parts are extremely durable in all sorts of difficult weather conditions.

Craftsmanship Leads the Way to 20 Years of Dependability



Wind turbines are often installed in locations that are difficult for people to access, such as offshore or in mountainous regions where there is a steady wind. This means they have to keep rotating reliably with little maintenance for periods of 15 to 20 years. NSK is applying its years of experience to spur the development of the wind energy industry. NSK's technologies and commitment to quality ensures a stable supply of highly reliable products that can withstand use in the harshest of environments.



Ralf Petersen
Application Engineer,
NSK Deutschland GmbH

NSK Europe Leads the Way in the Wind Energy Business

NSK Europe recognized the commercial and technical growth potential of the wind energy business in Europe at the end of the 1990s. However, it was challenging to communicate our enthusiasm to Japan, and we struggled to convince our customers here about NSK's superior technology and quality. We then tried to connect our customers directly to the engineers in Japan. Initially, linguistic and cultural differences between Europe and Japan were an obstacle, but eventually our customers and the engineers saw the potential synergies and developed strong bonds of trust. Today, NSK has a global business in bearings for wind power generators. We are proud to be leading the way for NSK's wind energy business.

Craftsmanship Leads the Way to the Future of Manufacturing

It is not uncommon for NSK to produce large bearings used in wind turbines—often several at once—in widely varying shapes and sizes, depending on the customer. And these bearings usually require sophisticated processing to prevent breakdown of the wind turbines. At the Fujisawa Plant in Japan, veteran employees apply their best craftsmanship to the advancement of production techniques and the improvement of processes in order to meet increasingly sophisticated customer needs and growing demand. They are also passing on skills to younger employees. NSK helps to disseminate Japanese manufacturing techniques to NSK Group plants around the world.



Support Tomorrow's World with Nature's Perspective



Prosperous societies have been regarded as having adverse effects on the environment. Taking up the challenge of developing technologies that facilitate expanded use of nature's renewable energy sources, NSK is determined to help build societies that ensure both mutual prosperity and global environmental responsibility.

Estimated CO₂ Reduction Effect

Global wind power generation capacity is predicted to reach 471 GW in fiscal 2020. It is estimated that this will reduce CO₂ emissions by about 400 million tons compared to the current thermal power generation. Of this total reduction, NSK believes that it can contribute 920,000 tons by developing and supplying optimal bearings for wind turbines, which, in turn, will spur the growth of the wind power industry. This is more than the amount of CO₂ emitted by the nearby 60 plants of the NSK Group worldwide in fiscal 2009.

NSK will also contribute to the spread of solar power generation by providing optimal ball screws and other products for generation equipment manufacturers.



Bearings used in wind turbines



Ball screws

How can a global company be a local company, too?

Global economic developments today transcend international borders, and corporations are building business networks that reach around the globe. It is important not only to provide products and services worldwide, but to meet the specific needs of customers in each location. Companies who hope to have successful global businesses are expected to contribute to the local communities where they operate in a unique way suited to each location.

Sustainability Goal

Be the Best Company in Every Community

Simply building a factory somewhere does not make a company a member of the local community. Naturally, the company must provide customers with products and services, but it is also has to earn trust as a reliable business partner. NSK does this by working with suppliers to foster relationships focused on quality, cost, and delivery times, and by helping distributors to understand NSK's unique strengths. Based on an understanding of the characteristics of each country and region, NSK fosters employees, develops technologies, and builds relationships of trust with members of the local community. NSK's aim is nothing short of being thought of as the best company in the area.

NSK Strategy 1: China



Aim to Be the Top Technology Center in China

I have been involved in the development of bearings since I joined NSK in Japan. In 2008, I was sent from Japan to my home country of China to strengthen the technology development system here. In China, many engineers are young and inexperienced, and the equipment for evaluating product performance could hardly be called sufficient. In 2009, we opened a new technology center and outfitted it with the latest equipment, which lifted the spirits of the young engineers. In the future, we will build an independent development system in which Chinese staff will meet the needs of Chinese customers with the aim of becoming the top technology center in China, in both name and ability.



Jun Liu
Deputy General Manager,
China Technology Headquarters,
NSK (China) Investment Co., Ltd.

In 2009, we opened a new technology center and outfitted it with the latest equipment, which lifted the spirits of the young engineers. In the future, we will build an independent development system in which Chinese staff will meet the needs of Chinese customers with the aim of becoming the top technology center in China, in both name and ability.

NSK Strategy 2: Malaysia



Malaysian Staff Ready to Take the Lead in Plant Development

It has been nearly 18 years since I joined ISC Micro Precision Sdn. Bhd. During this time the computer and consumer electronics industries in Malaysia have grown a lot. Along with that growth, production volume rose at our plant, which manufactures bearing units used in hard disks, and is now some 30 times larger than when we started. We have worked hard to understand the differences between Japan and Malaysia as well as the cultures of Malaysia's three major ethnic groups—Malays, Malaysians of Chinese descent, and Malaysians of Indian descent—and have worked to create a factory culture that is right for Malaysia. From here on we will continue to practice the manufacturing that we learned from Japan, and the Malaysian staff will take the lead in improving quality, production, and revenue with the aim of being a plant that contributes to community development.



Koo Woon Fu
Plant Manager,
ISC Micro Precision Sdn. Bhd.

NSK Strategy 3: Mexico



Support the Growth of Local Industry

Bearings, which are precise mechanical parts, only achieve their prescribed performance if the correct bearing product is selected when designing a machine, and if the machine is appropriately maintained during operation. For that reason, it is essential for people involved in the design and operation of machinery to have a proper understanding of product technology and handling methods. NSK has established training centers around the world for customers, distributors, students, and others in an effort to disseminate knowledge about bearings. In August 2009, NSK opened a new training center at Universidad Autonoma de Nuevo Leon in Mexico. The center is equipped with facilities for learning through hands-on experience basic knowledge about bearings and how to install and remove them from machines. The center, which accepts 500 students per year, will continue to train the engineers who will support further industrial growth.



NSK Strategy 4: World



Spread Knowledge of Bearings Throughout the World

NSK provides e-learning at a variety of levels so that anyone, anywhere, can learn about bearings at any time, from the basics of what bearings are, to specialized knowledge that is helpful in machinery design. Initially offered in Brazil in Portuguese, the e-learning courses have been expanded into seven languages so that they can be taken by more people around the world.



Dream

Be a Company That Is Deeply Valued by Local Communities

Ten, twenty, or thirty years from now, NSK hopes to be a company that is still needed, trusted, and deeply valued by all the communities in which it operates. The key to supporting those communities is transferring and optimizing with them the technical skills, quality, and taking over manufacturing capacity that makes NSK successful.



The NSK Group is committed to contributing to a more prosperous world and to protecting the global environment.



Norio Otsuka
President and Chief Executive Officer,
NSK Ltd.

**From Economic Crisis to Paradigm Shift
The NSK Group's Business Environment**

Fiscal 2009 was a challenging year for corporate management due to the effects of the global economic recession triggered in autumn 2008. All of us at the NSK Group worked together to execute group-wide measures to make it through the difficult business environment. As a result, the Group stayed in the black in the fiscal year ended March 31, 2010. At present, we are seeing some improvement in the business climate thanks to growth in emerging economies and the economic stimulus packages implemented in several countries. However, many observers expect the future to remain uncertain for some time to come. This only increases my determination to ensure the NSK Group overcomes this difficult period by dealing with change nimbly.

In this economic climate, the human pursuit of prosperity has rapidly spread from developed to developing countries. Now, the growth of emerging economies has become a significant factor driving the global economy. On the other hand, concern is continuing to mount about environmental problems such as

the depletion of resources, the threat of climate change, and negative impact on ecosystems. Today, a variety of initiatives are underway in many parts of the world to create sustainable societies that can prosper without damaging the global environment. From here on, changes in the industrial structure are expected to move into high gear, pushed by dynamics including the development and advancement of new technologies that lead to energy savings such as hybrid cars, electric vehicles, LED lighting, and smart grids; the development of infrastructure with a low environmental impact such as inter-city high-speed railways; industrial promotion to expand use of natural energy such as wind and solar power; and the environmental regulations and assistance measures of national governments. The capacity of companies to actively participate in this paradigm shift aimed at achieving a balance between prosperity and the environment will be a key factor in corporate growth in the future.

At the NSK Group, we are determined to embrace this paradigm shift by accurately ascertaining the products and technologies truly needed by customers and the broader society and ensuring that our manufacturing business meets those needs.

**Our Contribution to Customers and the Broader Society
Main Activities in Fiscal 2009**

The NSK Group's main products, such as industrial machinery bearings, precision machinery and parts, and automotive products, all contribute to greater reliability and energy savings by facilitating smooth movement in the machines in which they are incorporated. The Group has conventionally regarded the basis of its business activities as providing customers with beneficial products that are distinguished by high quality and outstanding technology. The Group has also aspired to become a truly "local" company when expanding its business by respecting the culture and customs of each country and region and involving local staff in community-based business operations. In other words, we consider the Group's growth as interdependent with the growth of customers and communities.

In fiscal 2008, the Group adopted NSK Eco-efficiency Indicators (Neco) as metrics to drive the development of environmentally friendly products. At present, products developed using Neco are lauded by customers and are helping to conserve energy and resources through their growing use in hybrid cars, consumer electronics, and plant facilities. Moreover, showing social appreciation for this initiative, NSK won the Award of the Director-General of the Industrial Science and Technology Policy and Environment Bureau, Ministry of Economy, Trade and Industry (METI), Japan, at the Eco-Efficiency Awards 2009.

The NSK Group is also aiming to contribute to China's growth by building a self-sufficient business structure that can provide everything from product development to after-sales services, meeting customers needs in a wide range of industrial fields. Toward that end, in October 2009 NSK opened its largest technology center outside Japan in the city of Kunshan, Jiangsu Province. Furthermore, in April 2010 the Company put into operation a plant for precision machinery and parts that it built in the city of Shenyang, Liaoning Province. The Company also established a new company in the same city and is currently preparing to produce large-size bearings there.

**Realizing Sustainable Growth
New Mid-term Plan Launched**

Our new mid-term plan got under way in fiscal 2009. This plan, which will be in effect until fiscal 2012, is an action plan for building a foundation for realizing sustainable growth while navigating the major changes in the world—changes that should be recognized as

a paradigm shift—by correctly understanding needs outside the NSK Group, in particular those of our customers.

At the same time, in accordance with the vision set out in our previous mid-term plan, we will continue heightening the quality that is the lifeblood of a manufacturer, not only of products and services but also of overall operations, to become "No. 1 in Total Quality." In these efforts, we will further strengthen the foundations of our operations: sales capability, technological development capability, manufacturing capacity, global business management capability, and personnel development capability.

**Strengthening the Foundation of Our Business
Advancing Human Resources Development**

The growth of the NSK Group is impossible without the growth of each and every one of our employees. Naturally, we are committed to maintaining our foundation of sincere business activities by enhancing training regarding quality assurance, CSR, compliance, and other issues. At the same time, I will see to it that employees around the world with different cultural backgrounds reach beyond national and organizational boundaries and deepen their mutual understanding, discuss issues, and try to improve by learning from each other. Our aim is to empower individuals and organizations to grow on their own, and in so doing to ensure the overall growth of the NSK Group.

With that goal in mind, we will continue to foster a corporate culture that provides "challenges and opportunities to our employees, channeling their skills and fostering their creativity and individuality" as called for in our Management Principles. We will strive to enable diverse human resources in different countries and regions to work with vitality as we work to provide solid solutions for the challenges faced by our customers and the world as a whole.

Conclusion

The NSK Group is supported by a wide range of stakeholders, including customers, suppliers, shareholders, investors, and local communities. The aim of this report is to communicate as clearly as possible the Group's perception of its stakeholders' expectations, the aims of its initiatives, and the progress of those initiatives.

My hope is that the information shared in this report will help the Group to build even stronger relationships with all of our valued stakeholders. I invite your remarks on the report itself, as well as your candid feedback regarding the NSK Group's business activities.

The NSK Group's CSR

Mission Statement

NSK aims to contribute to the well-being and safety of society and to protect the global environment through its innovative technology integrating MOTION & CONTROL. We are guided by our vision of NSK as a truly international enterprise and are working across national boundaries to improve relationships between people throughout the world.

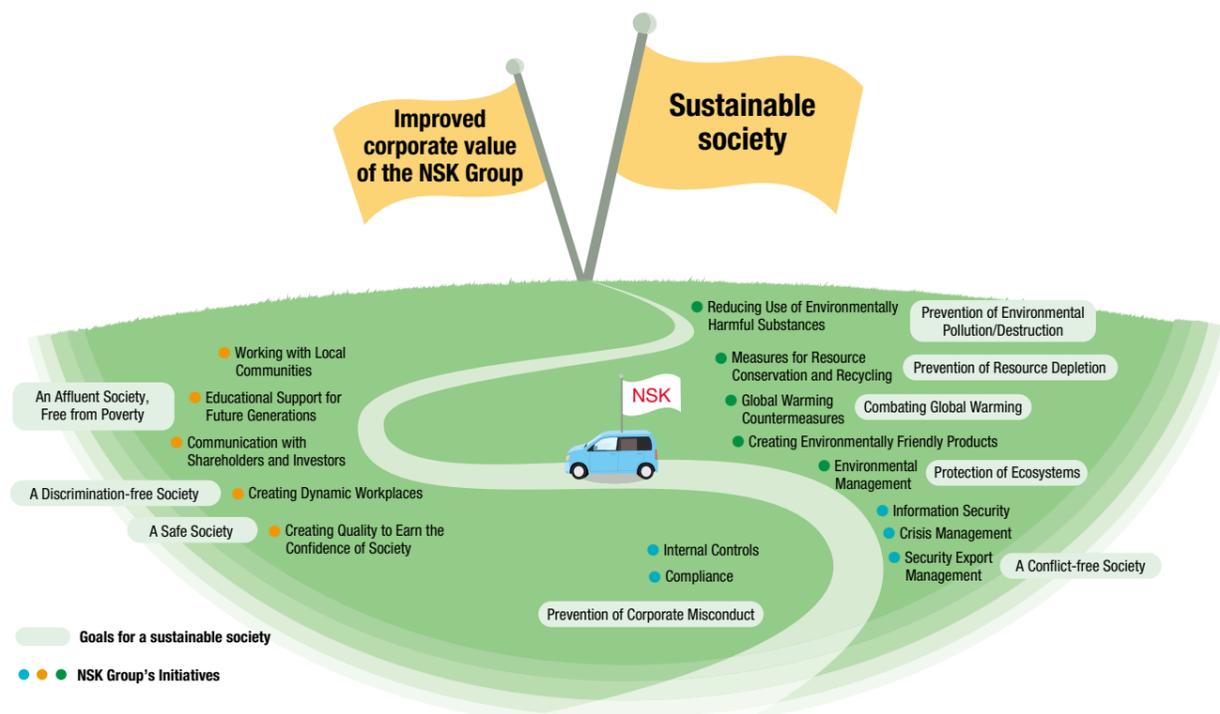
Management Principles

1. To serve our customers through innovative and responsive solutions, taking advantage of our world-leading technologies.
2. To provide challenges and opportunities to our employees, channeling their skills and fostering their creativity and individuality.
3. To identify the needs of the times and of the future and to use all of NSK's resources to meet those needs by being versatile, responsive and dynamic.
4. To work together with our employees and contribute to the communities in which we operate.
5. To manage our business from an international perspective and to develop a strong presence throughout the world.

The NSK Group's View of CSR

NSK's Mission Statement makes clear the Group's commitment to contributing to the development of society and to the protection of the global environment, and its Management Principles set the course to realizing these goals.

The NSK Group's products have the special characteristic of aiding the smooth functioning of a wide range of machinery, and they support the reliability, safety, and energy efficiency of the machines into which they are incorporated. The NSK Group regards its fundamental corporate activity as contributing to smoothly-running, safe societies, protection of the global environment, and the realization of sustainable societies through the supply of those products—that is, through the Group's main business. The NSK Group aims to achieve greater corporate value and sustainable growth by ensuring that all directors and employees are firmly aware of the Group's roles and by making sincere efforts to contribute to business growth and society by taking the perspective of customers and other stakeholders.



Management Structure Supporting Sustainable Growth

Trends

The international community must cooperate to overcome a range of challenges including poverty, conflict, and environmental problems in order to realize a sustainable world. As corporate activities expand globally, companies are expected to do their part to help solve the challenges of their respective countries and regions. They are called upon to contribute to the global community by providing helpful products and services through ethical business activities and respecting local cultures and customs.

NSK's Approach

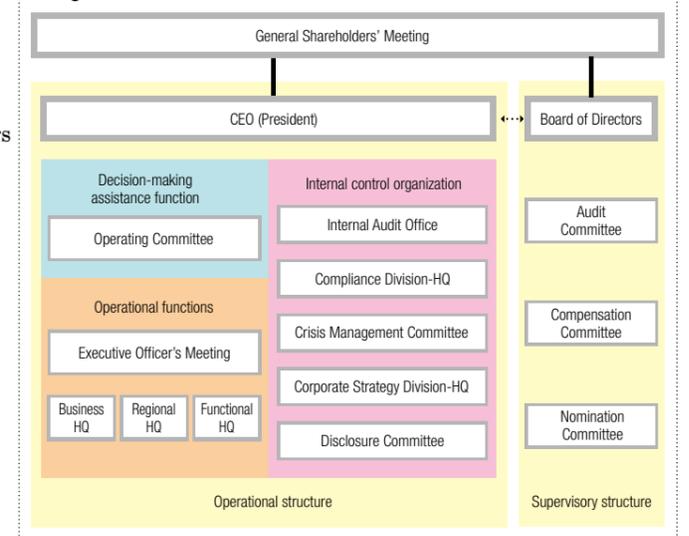
Achieving Sustainable Growth by Increasing Management Transparency and Soundness

The NSK Group established a corporate governance framework and follows a policy of transparent and sound management in order to achieve sustainable growth as a company while meeting the expectations of society.

The NSK Group's governance framework builds internal control organizations solidly into the operational structure, while also ensuring separate, objective management oversight of business execution. It also includes independent committees which oversee specific aspects of corporate governance.

With the aim of accurately and flexibly meeting the ever-changing needs of customers and responding to the globally expanding market, the NSK Group created a system in which business sites and group companies carry out their tasks under a business headquarters that oversees measures tailored to the industrial fields of customers, and a regional headquarters that oversees measures suited to the characteristics of each country and region. The functional headquarters organizations, including the Quality Assurance Division-Headquarters and Compliance Division-Headquarters, take the lead regarding issues that must be addressed on a group-wide basis, such as the improvement of quality and the strengthening of compliance. These functional headquarters increase cross-sectional cooperation and promote efficient initiatives.

Figure 1: Governance Framework



Mid-Term Goals

Enhance Total Quality and Meet the Expectations of Customers and the Broader Society

The NSK Group is continuing the initiatives from its previous mid-term plan aimed at achieving its vision of becoming "No. 1 in Total Quality." This means increasing the quality of not only products but also information and services, and the quality of functions such as development, design, procurement, manufacturing, marketing, and distribution. In this way, the Group will strengthen the foundation that supports its sustainable growth. At the same time, it will positively engage the paradigm shift which calls for a balance between prosperity and the environment, and thereby meet the expectations of its customers and the broader society.

FY2009 Activities

Efforts Made to Improve the Effectiveness of the NSK Code of Corporate Ethics

Pages 14-15 of this report describe initiatives for increasing management transparency and soundness. Pages 16-38 cover the status of initiatives aimed at ensuring the sustainable growth of the NSK Group.

In fiscal 2008, NSK revised the NSK Code of Corporate Ethics. In fiscal 2009, the Group revised and informed group members of its *NSK Code of Corporate Ethics Guidebook*, which explains the code of conduct to ensure group-wide compliance. NSK also appointed compliance leaders at Group companies in an effort to create a structure for further disseminating the Code of Corporate Ethics. In addition, the Group implemented, as planned, activities relating to internal controls over financial reporting, information security, and preparation against disasters (e.g. business continuity planning).

Strengthened Compliance System

NSK develops corporate regulations regarding compliance with laws and corporate ethics and undertakes activities aimed at ensuring all directors and employees adhere to them. In fiscal 2009, the Group strengthened its compliance system by appointing compliance leaders at group companies outside Japan in order to disseminate compliance initiatives group-wide.

The NSK Group operates whistle blower "Hotline" systems, one in-house at the Compliance Division-Headquarters and one staffed by an outside lawyer. Both are available to employees and the outside system is available to suppliers. The system allows users to remain anonymous and ensures they suffer no unreasonable loss from using the Hotline.

NSK Code of Corporate Ethics Guidebook Revised and Disseminated

The NSK Code of Corporate Ethics stipulates the basic rules that all directors and employees of the NSK Group must observe.

NSK Code of Corporate Ethics (extract)

(Established: February 22, 2002)
(Revised: January 1, 2009)

NSK Code of Conduct Concerning Compliance (by item)

1. Compliance with Antitrust Laws
2. Compliance with Export-related Laws and Regulations
3. Prohibition of Commercial Bribery (handling of entertainment, gifts, etc.)
4. Transactions with Public Institutions and Handling of Political Donations
5. Accurate Recording and Processing
6. Prohibition of Insider Trading
7. Handling of Intellectual Property
8. Prohibition of Illegal Activities and Anti-social Conduct
9. Protection of Corporate Assets
10. Handling of Confidential Information
11. Relations with Customers
12. Relations with Suppliers
13. Relations with Competitors
14. Prohibition of Discrimination and Cultivation of a Sound Workplace
15. Respect of Fundamental Rights at Work
16. Global Environmental Protection

Note: The NSK Code of Corporate Ethics applies to NSK Ltd., its consolidated subsidiaries (unless they have established their own code independently), and NSK-Warner K.K.

In fiscal 2009, NSK revised the *NSK Code of Corporate Ethics Guidebook*, which explains the Code of Corporate Ethics, and distributed it throughout the Group. The Group also provides e-learning and group training sessions to ensure all directors and employees understand the code and adhere to it thoroughly in their day-to-day work.

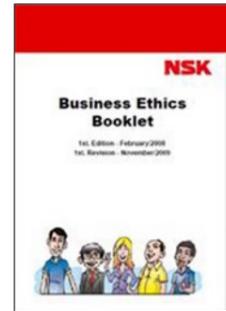


Photo 1: Business Ethics Booklet revised by NSK Brasil Ltda.

Employee Training Enhanced

NSK provides a variety of training sessions to ensure that employees group-wide have the fundamental knowledge they need to conduct honest business activities—including information about CSR, compliance, information security, and internal controls.



Photo 2: E-learning materials

CSR Training Session

I felt the need to be more aware that the creation of technologies and products beneficial to society is the R&D department's role as part of more proactive CSR.



Takeshi Murakami
Corporate Research & Development Center
NSK Ltd.

I often forget the importance of CSR because I am usually so busy, but the training session reminded me to be aware of our connection to society.



Kanako Mori
Corporate Research & Development Center
NSK Ltd.

In fiscal 2009, NSK established a system that enables employees who join any NSK Group company in Japan during the course of the fiscal year to receive the initial training they need at any time. This is in addition to the e-learning that is provided for all directors and employees. Continuing from fiscal 2009, lecture-based training sessions were also provided.

In fiscal 2010, similar e-learning is being provided at Group companies outside Japan.



Photo 3: Workshop during a training session

Preparing for Disasters and Other Crises

NSK is working to establish business continuity plans (BCP) as part of its efforts to ensure the Group is ready to withstand disasters.

In fiscal 2009, the problems for each business site were identified for the BCP that was prepared in case of a major earthquake. The Group also started working on initiatives to cope with an outbreak of new influenza strains.

Export Management System Updated with Legal Changes

NSK has strengthened its export management system to conform to new export-related regulations intended to secure peace and security in the global community by preventing the export of products and technology that could be used to manufacture weapons.

In fiscal 2009, in response to the first revision of Japan's Foreign Exchange and Foreign Trade Act (export management-related sections) in 22 years, the Company reexamined its voluntary management system and prepared or updated related manuals.

Improvement in Internal Control over Financial Reporting Report System

In fiscal 2009, the second year this system had been in operation, NSK continued to further establish internal controls and improved the system to enable more efficient and effective assessments. As in fiscal 2008, NSK confirmed the effectiveness of the design and operation of internal controls of NSK Group companies in fiscal 2009. The Group also obtained an audit certification (unqualified opinion) from an independent auditor.

Information Security Strengthened to Prevent Information Leaks

NSK is streamlining printing equipment and adding personal authentication functions to enable logging of print commands to prevent the leakage of information through printouts. In fiscal 2009, these measures were completed at NSK's headquarters and will be implemented at other business sites in the future.

Additionally, NSK is shifting to thin client computing, in which data is controlled centrally on a server and no information is stored on individual computers, in order to prevent the leakage of digital information.

NSK Action

Activities in China for Internal Control over Financial Reporting



Di Xiaolei (from left), **Wei Beilei**, **Zheng Ying**, **Jiang Nan**, and **Tsutomu Yamada**
Financial Department, NSK (China) Investment Co., Ltd.

NSK's headquarters in China has been undertaking activities to improve internal controls over financial reporting since March 2007. In fiscal 2009, audits were conducted at the headquarters in China and three other Chinese Group companies. NSK's headquarters in China is also preparing to audit many other Chinese Group companies in the future. We regard the strengthening of internal controls as a foundation that will support the further growth of NSK's business in China. Accordingly, our team will continue cooperating with relevant parties to strengthen this work.

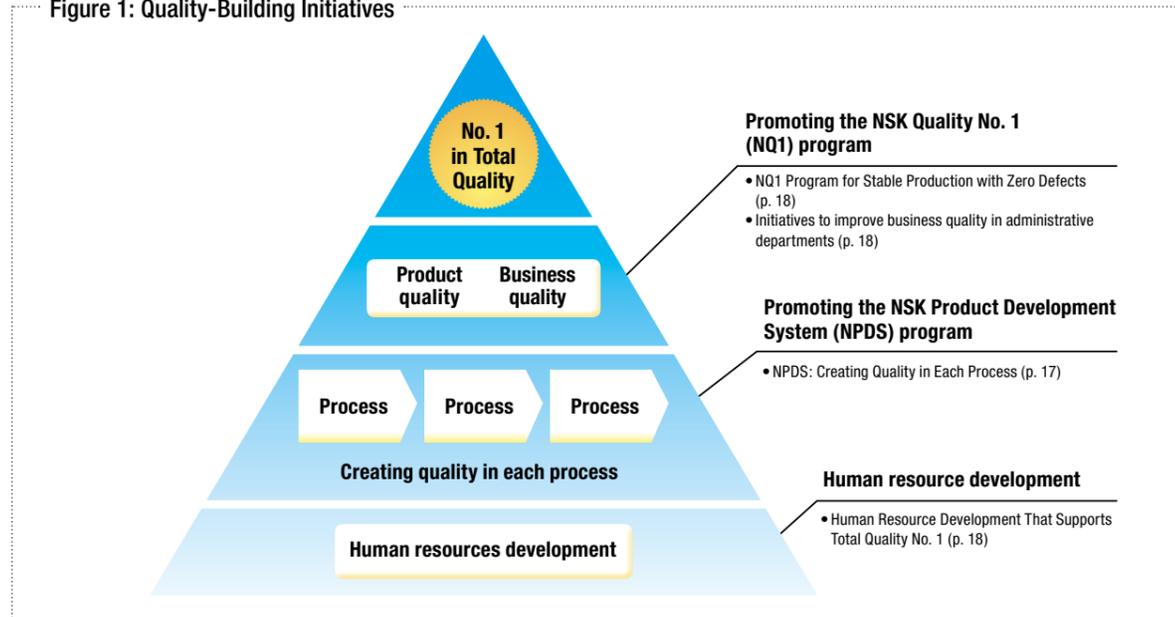
Creating Quality to Earn the Confidence of Society

Trends Industrial products that support today's affluent lifestyles must perform their prescribed functions safely and reliably. As the advance of technology and globalization simultaneously accelerate, companies are expected to contribute to the growth of their customers and the broader society by providing high-quality products and advanced technologies that meet the specific needs of consumers across a range of countries and regions.

NSK's Approach **Total Quality No. 1**

The NSK Group aims to become "No. 1 in Total Quality." In other words, the Group is working to achieve the industry's best quality in everything it delivers—not only products and services, but also information. The Group believes that this commitment to quality ensures that its products will satisfy customers all over the world. In order to become "No. 1 in Total Quality," the NSK Group is taking steps such as increasing the level of quality built into its products and raising the quality of administrative functions through human resources development.

Figure 1: Quality-Building Initiatives



Mid-Term Goals **Facilitating Quality Creation That Ensures Customer Satisfaction**

In order to facilitate the creation of quality levels that are indispensable to meeting the NSK Group's mid-term plan, the Group is carrying out activities under the following three programs.

- 1. NSK Product Development System (NPDS)**
In order to quickly transform new customer orders into reliable, stable production, the NSK Group is promoting initiatives that build quality into each process.
- 2. NSK Quality No. 1 (NQ1)**
The NSK Group is promoting initiatives to realize stable production and ensure near-zero defects.
- 3. Human Resources Development**
The Group is promoting human resources development in order to build a stronger foundation for quality creation.

FY2009 Activities **Quality Assurance System Strengthened**

In order to provide even more precise and timely support to customers across a variety of countries and regions, the NSK Group has strengthened its quality assurance system. In response to new customer orders, the Group has also posted personnel with a high level of professional knowledge in design inspection positions, and has strengthened its testing process to ensure that all issues have been resolved completely before moving into production.

Strengthening the Global Quality Assurance Organization

The NSK Group has established quality assurance departments in Europe, the Americas, and China, as well as quality assurance departments in other areas. This has reinforced the Group's global quality assurance organization by providing support tailored to the needs of customers in each country and region. In the event of a problem with a product or service, information can be provided quickly to customers. The relevant departments are brought together, and take swift and appropriate countermeasures to prevent the problem from spreading. The causes are promptly investigated and measures are taken to prevent reoccurrence.

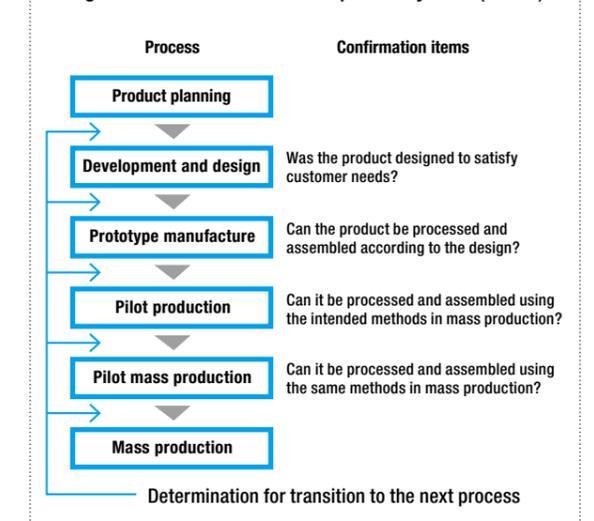
Figure 2: Global Quality Assurance Organization



NPDS: Creating Quality in Each Process

The NSK Group deploys its NSK Product Development System (NPDS) globally. The system enables the Group to respond to new customer orders with speed and reliability, to steadily develop products that meet customer expectations, and to ensure stable production. When a new order is received, the technological issues, capital investment, and relevant patents are first thoroughly discussed. Then a determination is made as to whether the product can be manufactured to satisfy the customer's needs and whether the order can be accepted. At each juncture in the process, from product planning to development and design, prototype manufacture, and mass production, verification is made that issues are being resolved, thus ensuring stable production. In fiscal 2009, the checking function for the transition between processes was further strengthened.

Figure 3: NSK Product Development System (NPDS)



Obtaining Quality Assurance Management System Certification

The NSK Group has obtained one or more of the following certifications in accordance with the products that each plant manufactures: ISO 9001, the international standard for quality management systems, ISO/TS 16949, the quality system for automotive production and relevant service part organizations, and AS 9100 certification, the quality system for the aerospace industry. This ensures that the NSK Group's products meet the high quality standards required by customers. As of March 31, 2010, all 51 product manufacturing sites in the NSK Group had obtained one or more of these certifications.

NSK Action

Europe Expanding Efforts to Be No. 1 in NSK Total Quality



Jeff Parkes
Executive,
Quality Assurance
Department,
NSK Europe Ltd.

The NQ1 program at NSK's European sites started with manufacturing, but total quality cannot be ensured by manufacturing alone. So in 2008 we expanded NQ1 activities to support functions and business units. We are now pursuing total quality, European style, as we implement our mid-term plan through 2012.

NQ1 Program for Stable Production with Zero Defects

The NQ1 program is being implemented with the cooperation of manufacturing, development and design, quality assurance, sales, distribution, and administrative departments across the NSK Group. The objective is to optimize the flow of both information and physical items through all processes from parts and materials procurement to delivery. The NSK Group aims to bring defects as close as possible to zero, and to achieve more efficient, stable production.

For example, in fiscal 2008, NSK Steering Systems Co., Ltd., implemented the program by cooperating with relevant departments and machinery manufacturers on improvement initiatives for production equipment. As a result, in fiscal 2009 the defect rate was greatly reduced, and the initiatives are now being expanded to other processes and sites.



Photo 1: NQ1 program at NSK Steering Systems Co., Ltd.

NSK headquarters is carrying out improvement activities in order to increase business quality in administrative departments.



Photo 2: Business quality improvement activities at NSK headquarters

Human Resources Development That Supports Total Quality No. 1

In order to achieve customer satisfaction, it is vital for all employees to understand their own roles, to strengthen their ability to communicate with one

another, and to keep improving the quality of their work. The NSK Group carries out human resources development by providing employees with education and training, and asking them to participate in work improvement activities.

In order to ensure the global development of quality knowledge training, the NSK Group develops in-house instructors, and is promoting a training system for sites outside Japan. In fiscal 2009, the Group started a quality knowledge education program in the US using in-house instructors trained locally the previous year. In fiscal 2010, the Group plans to train quality assurance personnel to be in-house instructors in China and Europe.

Utilizing an Inquiry Database

The NSK Group provides extensive technical support to ensure that customers are able to use its products correctly and obtain maximum performance from them. For example, at the NSK call center, experienced personnel respond to customer inquiries and strive to provide the right support. The records of support details are stored and shared in an internal database, and are used to improve response to customers.



Photo 3: Experienced personnel responding to customer calls

Global Development of Quality Guidance and Audits

Heat treatment and welding are important processes for the stable production of high quality products. NSK uses self-audits to monitor these important manufacturing processes at plants and suppliers around the world.

Starting in fiscal 2009, NSK's Quality Assurance Division-Headquarters, working together with the main plants in Japan, has been checking processes and management systems at plants outside Japan, while also training and certifying auditors. As a result, plants outside Japan can now implement the same quality guidance and audit systems as those in Japan, and they are also autonomously building their own quality management mechanisms that include suppliers.

Indonesia Improves Quality Using Kakotora Activities

The Jakarta Plant in Indonesia implements monthly *kakotora* activities, following the lead of headquarters in Japan. *Kakotora*, which means "past problem" in Japanese, refers to quality assurance audits done to confirm that measures to correct past quality problems are being implemented continuously. If measures are not being implemented continuously, the plant takes corrective action and makes sure countermeasures are set in place. The quality assurance team monitors not only production lines which had past problems, but also other production lines to ensure they do not develop similar problems. Everyone at the plant is committed to constant improvement of overall processes.



Photo 4: Kakotora activities by a quality assurance team at the Jakarta Plant

Basic Approach to Procurement

In order to carry out fair procurement activities that also consider impact on society and the environment, the NSK Group has instituted the Basic Procurement Policy. As the Group expands manufacturing worldwide, cooperation with suppliers in other countries and regions based on the Basic Procurement Policy has become an important issue.

Basic Procurement Policy (by item)

1. Economic Rationality
2. Fairness and Impartiality
3. Observance of All Laws
4. Respect for Moral Standards
5. Environmental Preservation, Resource Conservation

Supporting Suppliers to Improve Quality

The NSK Group regularly holds joint quality conferences with suppliers, and works with them to implement quality improvement measures.

In order to improve quality across the entire supply chain, in fiscal 2009 initiatives were

launched with the suppliers of the steel plate used to make bearing parts, and with the suppliers that process the steel plate before it is delivered to NSK. The initiatives began with each company gaining an understanding of the processes carried out at the other company. Through steps like this, the NSK Group is raising the bar on quality improvement initiatives across the entire supply chain.



Photo 5: Visiting a supplier to inspect the production line

NSK Supplier CSR Guidelines

Through procurement policy briefings and other opportunities, NSK encourages its suppliers to observe all legal requirements and to make efforts to protect the environment, respect human rights, and ensure worker health and safety. In fiscal 2009, in order to further promote CSR in the supply chain, the *NSK Supplier CSR Guidelines* were prepared, led by the Procurement Division-Headquarters. Starting in fiscal 2010, these guidelines will be distributed by all NSK Group companies to suppliers in order to share NSK's understanding of social expectations for corporate social responsibility. The NSK Group aims to steadily implement the measures needed throughout the supply chain.

NSK Action

Aiming for the Ideal Procurement Practices



Toshiteru Tomita
Planning Group,
Production Management
Department
NSK-Warner K.K.

My job involves the procurement of materials for the production of automotive parts. As the market keeps changing, so do the needs of our customers. Although it is a great challenge to procure just the right items from among the several thousand parts and materials needed in a timely fashion to deliver on our customers' expectations, I think it is an essential task for demonstrating the ability of our production department. In my efforts to secure efficient manufacturing, I always remember the slogan, "procure only what's needed, only when it's needed."

Environmental Management

Trends Concern is mounting over global environmental problems caused by human activity conducted in pursuit of affluence. The depletion of resources, progress of global warming, and impact on ecosystems are very serious issues. All humanity shares the challenge of building sustainable societies that can be prosperous without harming the environment. Today, people expect companies to be proactive about meeting this challenge, for instance by providing eco-friendly products and services and operating in an environmentally responsible manner.

NSK's Approach **Environmental Management Forms Basis of NSK's Existence**

The NSK Group adheres to the principle that global environmental protection, as outlined in the Group's mission statement, must be an ever-present concern in all business activities. Accordingly, the Group states in its Environmental Policy that environmental management forms the basis of its existence and pursuits. The NSK Group strives to raise the awareness of every single employee while working to create environmentally friendly products, implement global warming countermeasures and measures for resource conservation and recycling, and reduce the use of environmentally harmful substances.

Mid-Term Goals **Raising the Level of Environmental Action Group-wide**

The NSK Group has set up an Environmental Voluntary Action Plan to increase the efficiency of environmental initiatives Group-wide. It has also set common goals under the Environmental Voluntary Action Plan in areas such as global warming countermeasures, measures for resource conservation and recycling, and the creation of environmentally friendly products. Each business site and Group company establishes and systematically implements a specific action plan to achieve those targets. As a system to support those actions, production and other sites obtain external certification in ISO 14001—the international standard for environmental management systems—within three years of starting operations and continuously raise the bar on their actions by using the plan, do, check, act (PDCA) cycle.

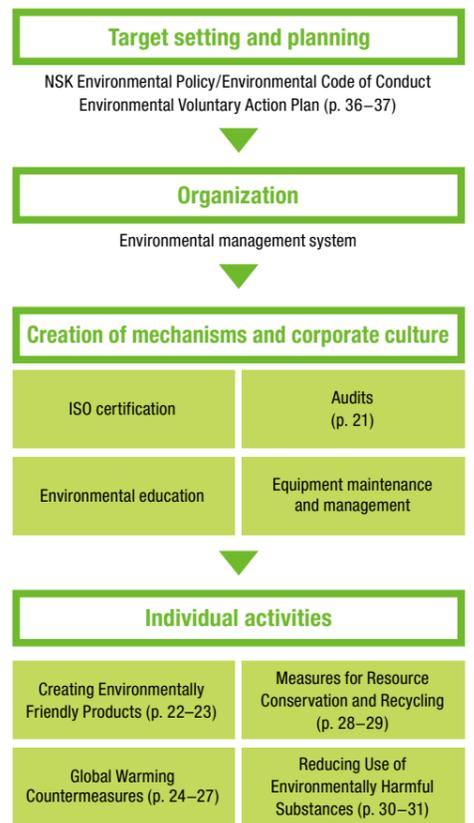
FY2009 Activities **NSK Environmental Policy Revised, Group's Commitment Increased**

In fiscal 2009, the NSK Group revised its Environmental Policy, originally established in 1997, in order to strengthen its global warming countermeasures, ecosystem protection, management of chemical substances, and other initiatives. The revised policy defines action guidelines in these areas.

NSK also began creating indicators to objectively assess the status of initiatives at each plant with the aim of accelerating them. It also strengthened working group activities on common issues among business sites group-wide, and leaders from each site worked together to move forward with effective measures.

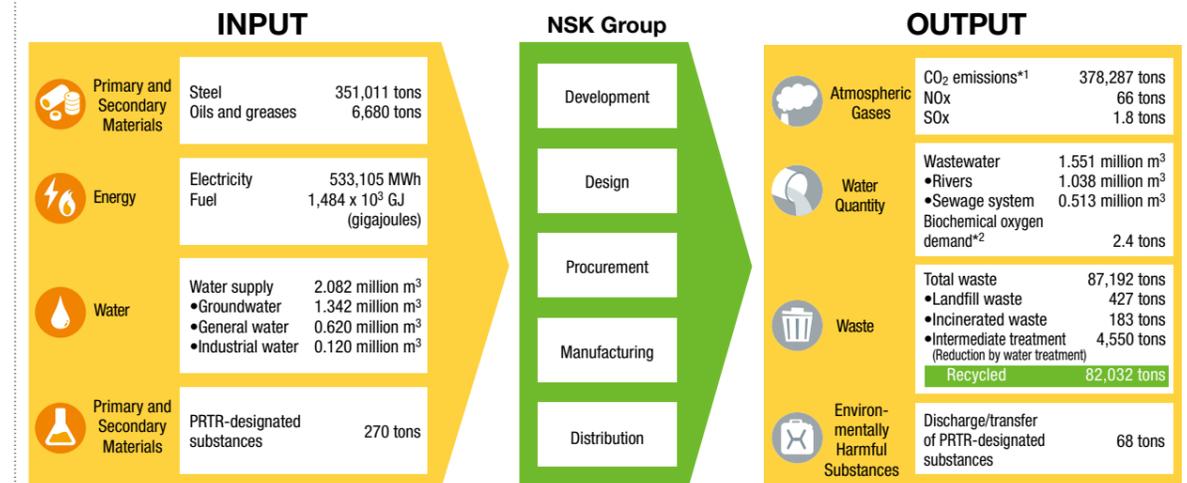
The Company sees that in the future it will need to further strengthen measures aimed to addressing global warming. Accordingly, it began considering, from a long-term perspective, visions it should pursue and the kinds of initiatives it should take.

Figure 1: NSK Group's Environmental Management



The NSK Group quantitatively monitors input of resources and energy into business activities and output of CO₂ emissions and waste in an effort to make effective use of resources and energy and to continuously reduce its environmental impact.

Figure 2: Input and Output of Business Activities in Japan



*1: Amount of CO₂ emissions is calculated according to Japan's Law Concerning the Promotion of Measures to Cope with Global Warming.
*2: River discharge.

FY2009 Highlights

Audits Help Improve Initiatives

Each business site in the NSK Group periodically conducts self-audits based on ISO 14001 and also undergoes external audits by certification bodies. The audits identified no serious nonconformities in fiscal 2009.

In addition, NSK headquarters conducted audits on individual topics such as environmentally harmful substances and waste management in an effort to clarify more detailed issues and further improve initiatives. In fiscal 2009, five business sites were checked in an environmental risk audit. NSK headquarters strives to reduce the possibility of environmental contamination accidents by implementing systematically necessary measures.



Photo 1: Environmental risk audit

The company will continue to periodically monitor the groundwater in the future and report the monitoring results and the progress of remediation work to administrative agencies and community residents. Additionally, groundwater remediation is ongoing at five other plants. The Group anticipates that several more years will be needed until the countermeasures are completed.

*3: See page 47 of the CSR Report 2009.



Photo 2: Groundwater remediation facility

Soil and Groundwater Remediation

In October 2008, soil and groundwater at the Shiga Works of Amatsuji Steel Ball Mfg. Co., Ltd. was found to be contaminated with a chlorinated organic solvent.*³ The remediation work to excavate the contaminated soil was completed by August 2009. Remediation of the groundwater began in December.

Compliance and Inquiries from the Community

A violation in which discharge to the sewer system slightly exceeded the effluent standard occurred at one plant and countermeasures were taken. In addition, eight inquiries were received from community members regarding noise and odors, and countermeasures were implemented, including the improvement of facilities and the strengthening of checking systems.

Note: Environment-related numerical data (pages 20–31) are for NSK plants and main Group companies (plants and distribution) in Japan and business sites outside Japan which have been in operation for at least three years.

Creating Environmentally Friendly Products

Trends Transforming the structure of society to avoid the progress of climate change and the depletion of resources in the future is a common challenge for humanity. Toward that end, companies are expected to make positive contributions through their products and services. This includes the development of new technologies, making those newly developed technologies even more sophisticated to aid in environmental protection, and the utilization of natural energies.

NSK's Approach **The NSK Group's Mission—Controlling Friction to Reduce Environmental Impact for the Whole Society**

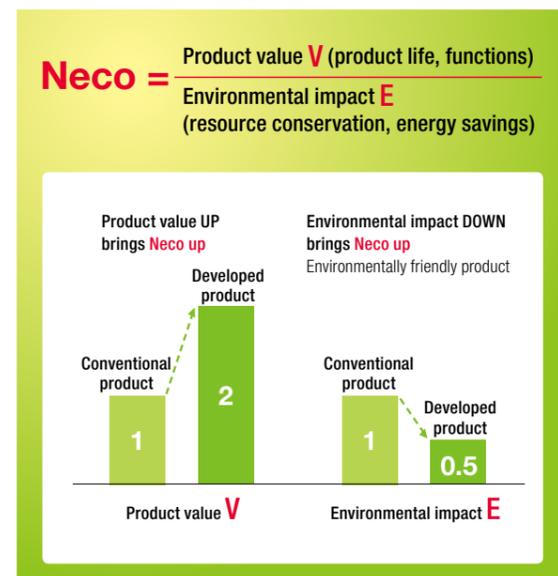
NSK's Environmental Policy states that the Group will, "actively support efforts to prevent global warming by developing environmentally friendly manufacturing processes and technologies." In line with this policy, the NSK Group is committed to applying tribology (friction control and lubrication technologies) to develop products and production technologies that help reduce energy loss.

The NSK Group established its own NSK Eco-efficiency Indicators (Neco) in fiscal 2008 as a yardstick for quantitatively assessing the degree to which products developed by the Group contribute to the environment, i.e., their environmental friendliness.

Neco is used to compare products in development against conventional products. It is derived by dividing a product's increase in value (product life, functions), V, by its decrease in environmental impact (product weight, energy consumption), E. Higher Neco values are obtained by reducing the amount of resources used in a product and the energy consumed during product use and by improving functional capabilities such as the life of the product and the maximum rotational speed. The greater a product's Neco value, the more environmentally friendly it is.

NSK has also created a calculation tool that enables NSK Group engineers to easily calculate the Neco value by inputting the E and V values for products under development, compared to conventional products. This tool is being used to facilitate the development of environmentally friendly products.

Figure 1: Neco—NSK Eco-efficiency Indicators



Mid-Term Goals **Focusing on Developing Environmentally Friendly Products**

In addition to increasing the environmental friendliness of products, the NSK Group is focusing on the development of products that contribute to environmental industries, such as wind and solar power generation. It will also investigate methods for assessing the environmental impact of the manufacturing process itself.

FY2009 Activities **Neco Put into Practice**

The NSK Group now uses Neco to facilitate the development of environmentally friendly products, and to promote its products to customers. In recognition of this initiative, NSK won the top prize at the Eco-efficiency Awards 2009, hosted by the Japan Environmental Efficiency Forum: the Award of the Director-General of the Industrial Science and Technology Policy and Environment Bureau, Ministry of Economy, Trade and Industry (METI). NSK also made a provisional estimate of the CO₂ reduction during product use (see pages 5 and 7).



Photo 1: Trophy from Eco-efficiency Awards 2009

General-purpose, Shielded Deep Groove Ball Bearings with High Load Capacity
Designed to Facilitate Machinery Downsizing, Energy Savings, and Better Maintainability

Industry as a whole is working to achieve higher functionality and performance together with environmental friendliness in all kinds of machinery. One of the best ways to do this is to make machines more compact, lighter, and more energy efficient. Accompanying this trend, the need for smaller bearings with high load capacity is increasing. This product features up to a 26% greater dynamic load rating than conventional bearings of the same size thanks to the use of large diameter steel balls. This enables the selection of smaller bearings, which also provides energy savings through downsizing and lower torque. Moreover, this product provides up to double the service life when replacing conventional bearings under the same conditions, thereby contributing to the improved maintainability of machinery.



Neco = 1.26

Low-torque, Highly Rigid, Sealed Thin-walled Angular Contact Ball Bearings
Contributing to Greater Efficiency for Industrial Robots and Other Machinery

Bearings used in the joints of industrial robots need to provide lower torque and higher rigidity in order to facilitate improved process efficiency and precision. Crossed roller bearings are often used for this purpose, but they have drawbacks, including high torque and a tendency for loss of precision due to wear over long-term use. Although a ball bearing, this product has the same or greater rigidity and load capacity as cross roller bearings. NSK also reduced starting torque by 50% and dynamic torque by 75% and attained long-term reliability. These improvements were achieved by optimizing the size and number of the steel balls and by using NSK's proprietary grease, which reduces precision lost due to wear.



Neco = 4.16

Toughcarrier™ Single-axis Actuator for Ultra-high Load Applications
Saving Energy on Manufacturing Lines

In auto manufacturing, production of multiple models on a single line is becoming commonplace. Electrically driven actuators are used extensively on these lines to freely control the movement of devices according to the automobile shape. This single-axis actuator uses rollers as rolling elements and provides ten times the service life and at least four times the load capacity of conventional products that use steel balls. This improved performance enables long-term, stable operation, tighter arrangement of production lines as a result of downsizing, as well as energy and resource conservation.



Neco = 9.72

Low-torque Ball Bearings for Hybrid Vehicles
Improving Fuel Efficiency in Hybrids

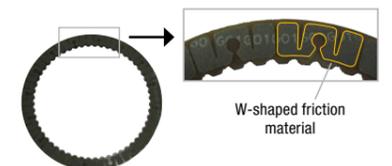
There is a need to reduce power loss in hybrid vehicles by minimizing rotating torque in bearings to improve fuel efficiency. Bearings used in transmissions agitate supplied lubricants during rotation, which generates resistance that greatly affects torque. This product dramatically cuts torque by up to 50–65% compared to conventional products thanks to the development of cages (parts that keep the steel balls equally spaced) with shapes that are less susceptible to lubricant resistance due to their very low unevenness, and thanks to the optimization of design, including reducing the number of steel balls.



Neco = 1.27

W-shaped Multi-segment Friction Plate
Increasing Fuel Efficiency in Automatic Transmission Vehicles

Friction plates manufactured by NSK-Warner K.K. are a clutch part that is incorporated into automatic transmissions for transmitting and cutting power. When the power is cut and the friction plate is running idle, a loss called drag loss may occur when torque is accidentally transmitted through oil that flows into the space between the friction plate and its opposing part. Processing the friction plate's friction material into a W shape and affixing it in equally spaced frames facilitates the discharge of oil, which enables this product to reduce loss by 30–70% compared to conventional products.



Neco = 1.81

Global Warming Countermeasures

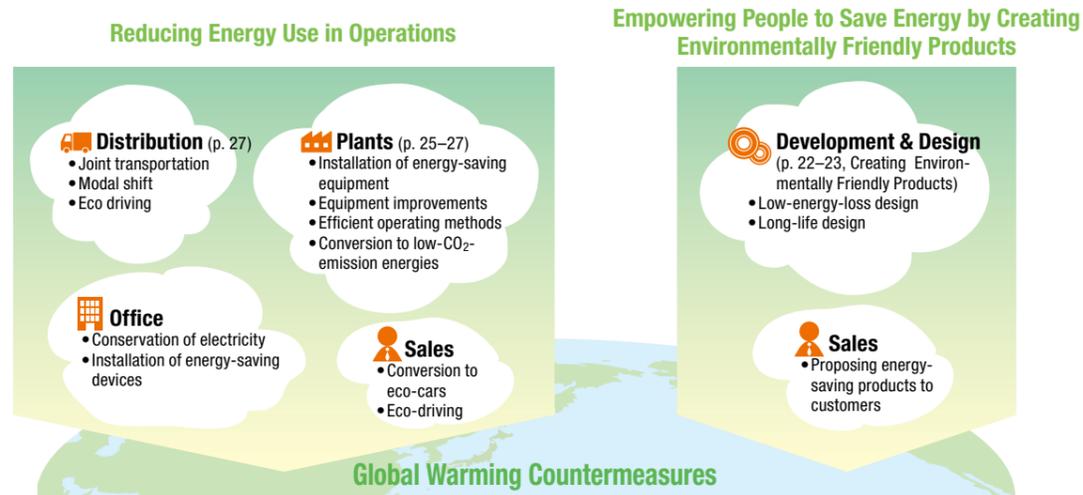
Trends Concerns are mounting that the advance of global warming will lead to increasingly serious climate change problems and cause tremendous damage including rising sea levels, droughts, localized torrential rain, and the spread of infectious diseases, as well as ever more serious effects on ecosystems. At present, the world is debating how to achieve substantial reductions in emissions of CO₂ and other greenhouse gases. Companies are expected to make aggressive efforts to develop new and more advanced technologies that will lead to energy savings and to reduce CO₂ emissions generated by their business operations.

NSK's Approach **Reducing Energy Use in Operations, and Empowering People to Save Energy with Environmentally Friendly Products**

The NSK Group is striving to reduce CO₂ emissions from its business activities through energy-saving efforts and the conversion to clean energies. It also contributes to the fight against global warming by creating environmentally friendly products*1 that reduce the CO₂ generated when machines move.

*1: See pages 22–23 for more about environmentally friendly products.

Figure 1: Contributing to Global Warming Countermeasures by Reducing Energy Use in Operations and Creating Environmentally Friendly Products



Mid-Term Goals **Pursuing CO₂ Reductions Across All Areas of Business**

The NSK Group is striving to reduce CO₂ emissions generated during business activities through efforts to reduce energy use, conversion to clean energies that generate fewer CO₂ emissions, and the improvement of production efficiency. The Group's fiscal 2012 targets are shown to the right.

- Plants**
 - In Japan
CO₂ emissions per production unit*2: 1% annual reduction from FY1999 level
Gross CO₂ emissions: Reduce CO₂ emissions for FY2012 to below FY2006 level
 - Outside Japan
CO₂ emissions per production unit: 1% annual reduction from FY2009 level
- Distribution (In Japan)**
Reduce energy consumed per production unit: 1% annual reduction from FY2006 level

*2: CO₂ emissions per production unit are defined as the amount of CO₂ emissions per value-added production unit. CO₂ emissions are estimated based on the coefficients provided by the Japanese Ministry of the Environment.

FY2009 Activities **Total Volume of CO₂ Emissions in Japan Reduced as Production Declines**

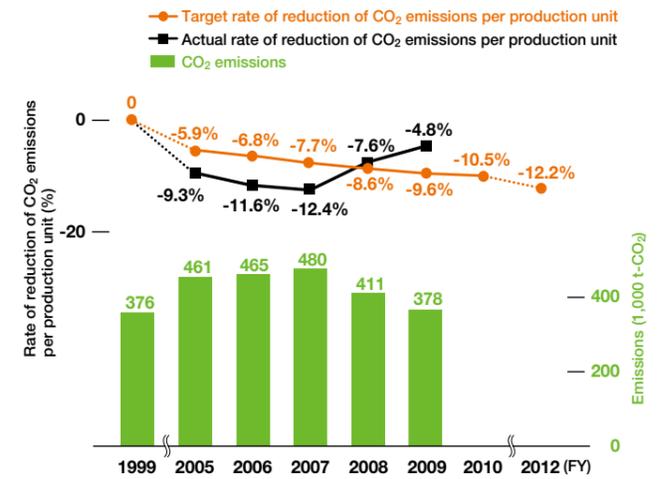
At plants in Japan, the total volume of CO₂ emissions for fiscal 2009 fell by 33,000 tons from the level in fiscal 2008 to 378,000 tons (82,000 tons in direct emissions and 296,000 tons in indirect emissions), following a substantial decrease in production. Despite this, CO₂ emissions per production unit were

only 4.8% lower than in fiscal 1999, leaving the target of a 9.6% reduction unmet. At plants outside Japan, the total volume of CO₂ emissions fell by 6,000 tons from the level in fiscal 2008 to 365,000 tons (29,000 tons in direct emissions and 336,000 tons in indirect emissions).

Five working groups (equipment energy measurement, heat treatment, spindles, compressors, and large-scale air-conditioning systems) were set up at plants in Japan to propel energy-saving efforts. The plants also moved ahead with energy conversion, switching over from heavy oil and kerosene to electrical power and municipal gas, which generate fewer CO₂ emissions.

Meanwhile, logistics departments in Japan improved transportation and loading efficiency and pushed the switchover to modes of transport that have a lower impact on the environment. These initiatives resulted in CO₂ emissions falling to about 16,000 tons in fiscal 2009, and a 5% reduction in the energy consumed per production unit compared to fiscal 2006.

Figure 2: CO₂ Emissions in Japan: Total Volume and Per Production Unit



Note: In fiscal 2009, data for one Group company that became part of consolidated reporting was added going back to fiscal 1999.

FY2009 Highlights

Equipment Energy Measurement Working Group Identifies Potential Energy-Saving Improvements

The Equipment Energy Measurement Working Group measured electricity and compressed air usage every second for different areas of equipment in order to identify energy loss in production machines and other potential improvements. The group used these findings to develop new energy-saving equipment and operate machines more efficiently.



Photo 1: Session for studying how to measure energy usage in equipment

NSK Action

Facilities Department in Europe Reduces CO₂ Emissions



Angela Nicol
NSK Europe Ltd.

The Facilities Department of NSK Europe has added strict CO₂ emissions limits as a selection criterion for company cars to help reduce CO₂ emissions generated by the company. Aiming for a 12% reduction per annum, the company also started introducing hybrid cars in fiscal 2009.

Home Energy Saving Contest for Brazilian Employees

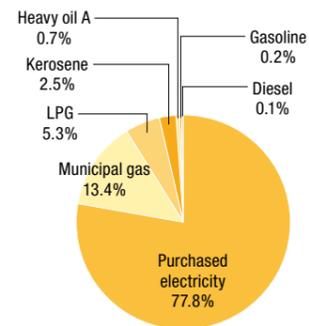


Roberto Aragão
Suzano Plant, NSK Brasil Ltda.

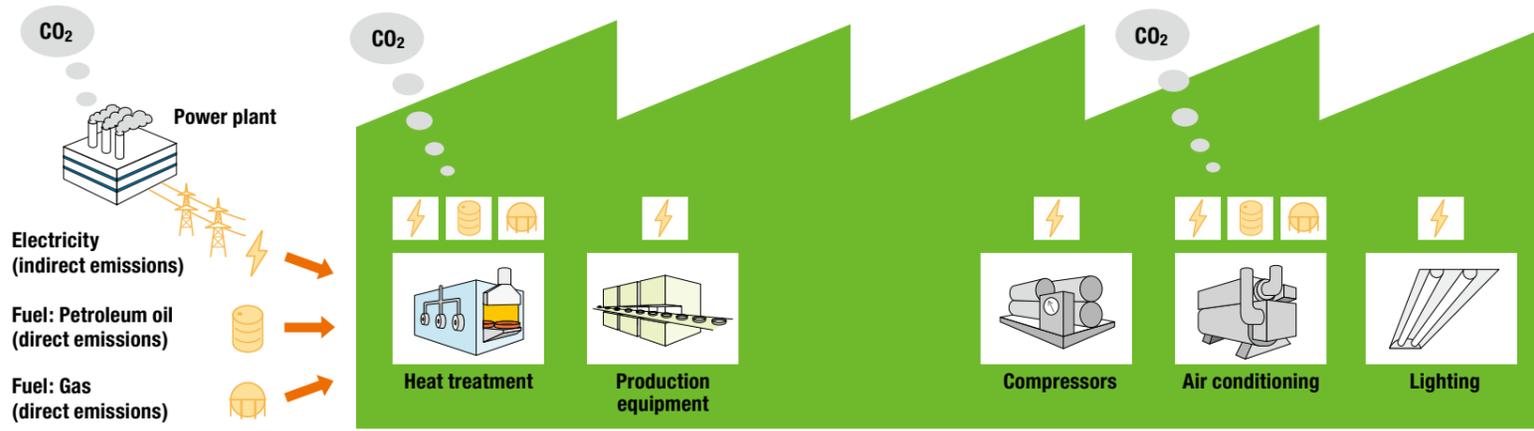
NSK Brasil's Suzano Plant held a competition among employees to reduce electric power consumption in their homes. I cut electric power use in my house by 33.5% and was the champion! I was rewarded with a beautiful bike. Now, I ride the bike to work instead of driving, which means my life is even more eco-friendly.

Figure 3: Main Initiatives to Reduce CO₂ Emissions

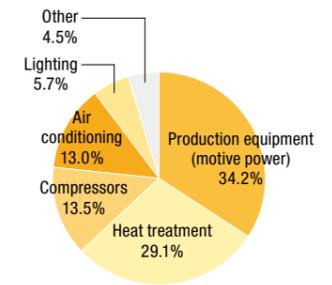
Breakdown of energy use in plants in Japan by type of energy (calorie basis)



Total energy use 6,687 x 10³ GJ



Breakdown of energy use by application in plants (calorie basis)



Heat Treatment Working Group Improves Energy Savings of Furnaces

This group installed power meters and gas flow meters to measure energy use in heat treatment furnaces used to heat parts such as the outer and inner rings of bearings. Based on the measurement results, the group standardized the operation methods for each furnace and reduced gas use.



Measuring exhaust gas and optimizing firing conditions

Spindle Working Group Attempts to Reduce Use of Pressurized Air

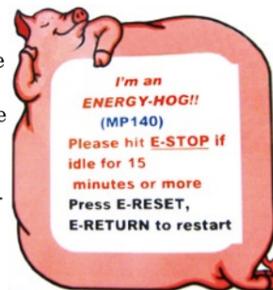
The NSK Group's plants use grindstones spinning at high speeds and precision on spindles in order to machine bearing parts with high precision. Spindles require large amounts of pressurized air, and a great number of spindles are used. For that reason, this group worked on developing spindles that do not use pressurized air and on reducing the use of pressurized air.

	Plant					Distribution
	Heat treatment	Production equipment	Compressors	Air conditioning	Lighting	
Reducing electricity usage Indirect emissions: CO ₂ emitted from power plants and regarded as generated by the user of electricity.	<ul style="list-style-type: none"> Optimization of operating conditions 	<ul style="list-style-type: none"> Control by inverters Streamlining Improvement of production efficiency Reduction of defects Downsizing Development of new technology 	<ul style="list-style-type: none"> Prevention of pressurized air leaks Reduction of pressurized air use Reduction of pressure used Control by inverters Optimization of operating conditions Upgrading to highly efficient equipment Development of equipment that does not use pressurized air 	<ul style="list-style-type: none"> Selection of models suited to conditions Optimization of running conditions Upgrading to highly efficient equipment Control by inverters 	<ul style="list-style-type: none"> Upgrading to highly efficient equipment Control by inverters Optimization of illumination Turning lights off 	
Reducing fuel usage Direct emissions: Directly emitting CO ₂ from the plant by combusting fuel (petroleum oil and gas).	<ul style="list-style-type: none"> Conversion to low-CO₂-emission energies Streamlining Improvement of insulation efficiency Optimization of operating conditions 			<ul style="list-style-type: none"> Conversion to low-CO₂-emission energies Selection of models suited to conditions Optimization of running conditions 	<ul style="list-style-type: none"> Improvement of load efficiency Joint transportation Modal shift 	

Bennington Plant in US Implements Energy Saving Activities for Production Equipment

The Bennington Plant of NSK Steering Systems America, Inc., is undertaking energy saving activities for its production equipment. Machines that are large consumers of energy are identified and shut off if they are not needed for more than 15 minutes.

Additionally, the plant is replacing hydraulic presses with electric motor-driven presses in an effort to save energy.



An appeal to save energy, attached to machinery that uses a lot of energy

Compressor Working Group Expands Activities to More Plants

In fiscal 2009, the Compressor Working Group expanded its activities to plants that had not implemented energy-saving measures in fiscal 2008. To start, it ascertained the capacity of current equipment in order to run machinery efficiently according to loads that fluctuate with production volume. It drew up energy-saving plans to be implemented and started specific initiatives in fiscal 2010.



Compressor study session

Large-scale Air-conditioning Working Group Evaluates Optimal Systems for Each Production Process

Plants require different large-scale air-conditioning systems depending on the environmental conditions of the production process. In order to select optimal air-conditioning systems, this group measured heat load data, including the temperature and humidity of actual processes and the amount of heat released by equipment. It used this data to consider optimal specifications for each set of conditions.



Checking existing air-conditioning systems to consider upgrading

Modal Shift

The NSK Group is implementing a modal shift—moving away from trucks for transport to trains and ships, which generate fewer CO₂ emissions. In recognition of the NSK Group's proactive efforts to expand transportation by car ferry, the company was awarded the Eco-Ship Mark in November 2009 by the Eco-Ship Modal Shift Project Executive Committee, which is organized by the Maritime Bureau of the Japanese Ministry of Land, Infrastructure, Transport and Tourism and shipping operators.



Eco-Ship mark

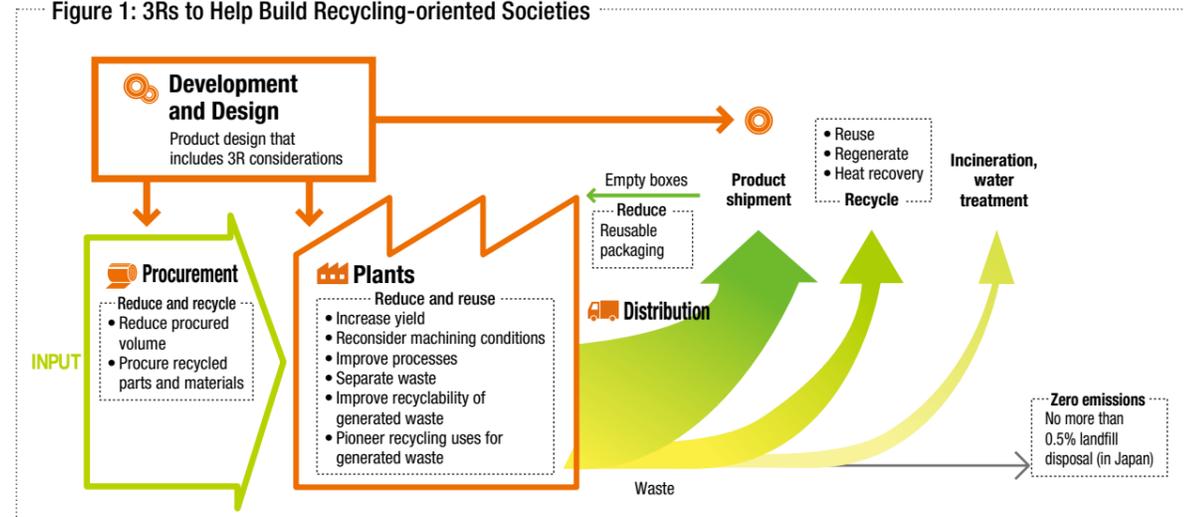
Measures for Resource Conservation and Recycling

Trends There is growing concern around the world that an economic system based on mass production, mass consumption, and mass disposal will end up depleting a wide range of resources in the future. Against this backdrop, companies are required to help build recycling-oriented societies by ensuring the efficient use of resources throughout the entire product lifecycle—from the extraction of resources through product use, to disposal.

NSK's Approach **Efficient Use of Resources in All Areas of Business Activity**

The NSK Group is working on reducing, reusing, and recycling (the 3Rs) to do its part in building recycling-oriented societies around the world. The Group's development and design divisions strive to develop products that can be produced without wasting raw materials and that can be easily recycled when disposed after use. At the manufacturing stage, the Group attempts to reduce the generation of waste by reconsidering machining conditions and also works to recycle waste that is generated, aiming to achieve "zero emissions"^{*1} in terms of landfill disposal. (See Global Warming Countermeasures on pages 24-27 for information about NSK's efforts to reduce its use of energy resources.)

Figure 1: 3Rs to Help Build Recycling-oriented Societies



Mid-Term Goals **Improving 3R Implementation**

NSK's main targets for fiscal 2012 are shown to the right.

In fiscal 2010, the NSK Group's plants in Japan aim to maintain zero emissions with a recycling rate^{*2} for wastes of at least 98%. In the area of distribution, the Group's plants in Japan aim to reduce packaging material waste by 3% compared to fiscal 2007. Plants outside Japan aim to achieve a recycling rate of at least 90%.

Development and design, plants
Reduce raw material waste by changing machining processes

Plants
In Japan: Achieve a recycling rate of at least 99% for waste and maintain zero emissions
Outside Japan: Achieve a waste recycling rate of at least 92%

Distribution
In Japan: Reduce packaging material waste by 5% from fiscal 2007

*1: The NSK Group has defined zero emissions as a landfill disposal rate of no more than 0.5%. The landfill disposal rate is calculated using the following formula, starting in fiscal 2008. The target was changed from 1% to 0.5% as of fiscal 2010.

$$\text{Landfill disposal rate} = \frac{\text{Landfill disposal amount}}{\text{Total waste} - \text{reduction by water treatment}} \times 100$$

*2: The recycling rate is calculated using the following formula, starting in fiscal 2008.

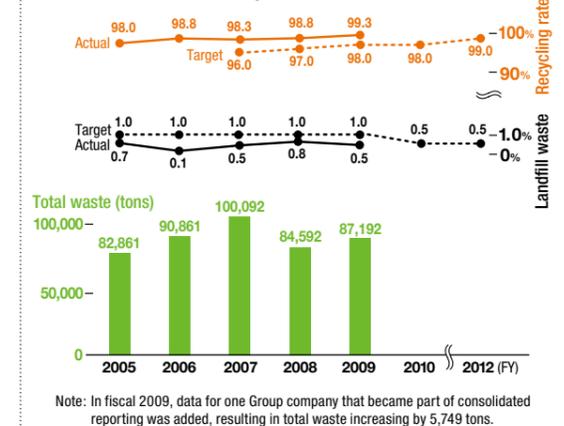
$$\text{Recycling rate} = \frac{\text{Recycled amount}}{\text{Total waste} - \text{reduction by water treatment}} \times 100$$

FY2009 Activities **Maintaining Zero Emissions**

The NSK Group's plants in Japan achieved a waste recycling rate of 99.3% and met the Group's zero emissions goal with a landfill disposal rate of 0.5%. In response, the Group changed its definition of zero emissions effective from fiscal 2010, tightening it from a final disposal rate of no more than 1% to no more than 0.5%. Additionally, efforts to reduce raw materials continued to make progress. For instance, the NSK Group reused scrap metal from the forging process for other parts as a measure to conserve resources.

Plants outside Japan improved their waste recycling rate by 1.9 points compared to fiscal 2008, achieving a rate of 90.9%.

Figure 2: Volume of Landfill Waste and Recycling Rates in Japan



Note: In fiscal 2009, data for one Group company that became part of consolidated reporting was added, resulting in total waste increasing by 5,749 tons.

FY2009 Highlights

Forging Scraps Reused as a Raw Material for Other Parts

Kuribayashi Seisakusho Co., Ltd., reduced its monthly waste by 52 tons by using disks of scrap metal from the bearing ring forging process as a raw material for other bearing parts.

Figure 3: Reuse of Scrap Metal from the Forging Process



Bands Made of Recycled Plastic Used

The NSK Group is applying the 3Rs to packaging materials in the distribution process. The shipping boxes used to transport products are fastened together on a pallet with plastic bands, and the Group has switched to using bands made of recycled plastic.



Photo 2: Bands made of recycled plastic (brown)

Paper Saving in Offices Maintained

NSK headquarters has streamlined its copiers and printers. It expects to reduce paper use by about 20% through double-sided printing rules and the addition of features to prevent misprints. It also reduced the overall number of devices, which has translated into reduced power consumption.

Enhanced Waste Management

Employees in charge of waste at each plant in Japan were given training and NSK headquarters audited 12 plants in an effort to increase waste management performance. Moreover, the persons in charge at each plant periodically visit treatment contractors to check the status of management using NSK Group standard check sheets. Results are provided to contractors to help them make improvements.



Photo 1: Checking the waste disposal management situation at a plant.

NSK Action

Recycling Rate Improved through the "Recycle Waste Bank"



Somporn Yaemsri
Environmental Team,
NSK Bearings
Manufacturing (Thailand)
Co., Ltd.

At NSK Bearings Manufacturing (Thailand) Co., Ltd., the employees started a new program called "Recycle Waste Bank." Before, we used to pay to dispose of beverage packages. Now, we separate waste into glass bottles, plastic bottles, and cans and treat them as salable and recyclable waste. As a result, the amount of waste has decreased significantly. Employees' have more awareness of recycling and the waste collection site has become neat and tidy. In fiscal 2009, we collected 10,016 kg of salable and recyclable waste.

Reducing Use of Environmentally Harmful Substances

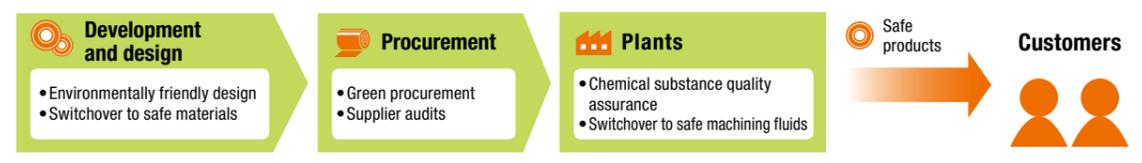
Trends Chemical substances have made modern life much more convenient. However, some chemicals can have adverse effects on human health and the environment. In response, international consensus was reached at the World Summit on Sustainable Development held in Johannesburg in 2002 to “aim by 2020 to use and produce chemicals in ways that do not lead to significant adverse effects on human health and the environment.” In response, tighter controls on the management of chemical substances are being introduced, as typified by Europe’s REACH Regulations,*1 and companies are expected to comply.

*1: Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) Regulation: A system regarding the registration, evaluation, authorization, and restriction of chemicals in the EU.

NSK's Approach Staying Ahead of Regulatory Progress

The NSK Group is striving to create products that use no environmentally harmful substances, in anticipation of tougher laws and regulations around the world and stricter voluntary standards from its customers. The Group tightly controls environmentally harmful substances through each stage of development and design, procurement, and manufacturing to ensure provision of safe products to customers.

Figure 1: Management of Environmentally Harmful Substances



Mid-Term Goals Build a More Sophisticated Management System

To ensure the provision of safe products, the NSK Group is building a system that reliably guarantees environmentally harmful substances are not included. The goals the Group expects to attain for fiscal 2012 are shown to the right.

In fiscal 2010, the Group is focusing on implementing green procurement at plants in Asia that make automobile steering systems and on updating its database by conducting surveys to identify the inclusion of environmentally harmful substances in parts and raw materials based on NSK’s latest *List of Environmentally Harmful Substances*.

- Development and design:** Reduce four types of environmentally harmful substances contained in products
- Development and design, and plants:** Manage the use of chemical substances for the products of all plants using the Chemical Substance Management System
- Procurement:** Complete the extension of green procurement to suppliers in Japan, China, and the ASEAN region
- Plants:** Complete a chemical substance quality assurance system for products, then eliminate machining fluids containing chlorine additives

FY2009 Activities Auditing of the System for Managing Environmentally Harmful Substances Strengthened

NSK’s headquarters conducted audits to make sure that the product chemical substance committees set up in each plant in fiscal 2008 with the aim of strengthening the control of environmentally harmful substances in Japan are functioning properly. The Company also trained 62 environmentally harmful substance auditors so that in the future each plant can autonomously conduct self-audits and supplier audits.

The NSK Group ascertained the use of nine types of environmentally harmful substances and started activities geared toward their replacement. In addition, the Group also revised its own ranking of environmentally harmful substances (prohibited substances, reduced substances, and controlled substances) in order to comply with the latest laws and regulations and customers’ voluntary restrictions. In addition, the Group strengthened control of chemical substances imported by plants in Europe in order to comply with Europe’s REACH regulations.

The Group reduced, according to plan, the number of PRTR*2-designated substances and the number of machining fluids containing chlorine additives used at plants in Japan.

*2: Japan’s law intended to facilitate improvement of chemical substance management by ascertaining the amounts released into the environment.

FY2009 Highlights

Replacement of DEHP with Alternatives Underway

Bis (2-ethylhexyl) phthalate (commonly abbreviated DEHP) is a plasticizer added to materials such as rubber and plastic to improve their workability. This substance’s potential as an endocrine disruptor has been reported, and in Japan it is a Class I Designated Chemical Substance under the PRTR Law, while in Europe it is a Substance of Very High Concern under REACH regulations.

The NSK Group has made it a policy to switch the materials for bearing seals that contain DEHP to alternatives. The Group is requesting the cooperation of customers and suppliers, and preparations for the switch are underway.

Chemical Substance Management Systems Put into Operation in China and Korea

In fiscal 2009, the Kunshan Plant in China and the Changwon Plant in South Korea established and put into operation chemical substance management systems. The plants are now preparing to implement green procurement in the future using these systems.

System for Managing Environmentally Harmful Substances Audited

The NSK Group verifies the status of management at each plant and implements improvement efforts to reliably guarantee that products do not contain prohibited substances. In fiscal 2009, NSK’s headquarters audited 15 plants in Japan. Self-inspections were conducted based on a checklist at 19 plants outside Japan. The audits identified delays in the establishment of rules and issues regarding the education of employees at some plants, and efforts were strengthened accordingly.

Reducing the Number of Oils Containing PRTR-Designated Substances

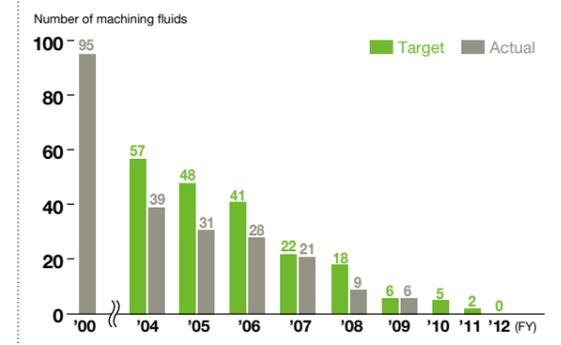
The NSK Group has reduced the number of oils containing PRTR-designated substances used in plants in Japan by 70% against the base year of fiscal 2000. In fiscal 2008, Japan’s PRTR Law was amended with the addition of more regulated substances. In response, in fiscal 2009 the NSK Group obtained from suppliers material safety data sheets (MSDSs) that are compliant with the

amended law for all oils purchased by all business sites, in order to ascertain the inclusion of the newly regulated substances and properly manage them.

Reduction of Machining Fluids Containing Chlorine Additives

The NSK Group has reduced the number of machining fluids containing chlorine additives used in plants in Japan to only six. It is difficult to substitute machining fluids with a high content of chlorine, which are used in processes with especially severe machining conditions among the different pressing and broaching processes, and so the attempt to find alternatives is continuing. The NSK Group will strengthen its efforts with the aim of eliminating these substances by fiscal 2012.

Figure 2: Change in the Number of Machining Fluids Containing Chlorine Additives in Japan



NSK Action

Ensuring the Proper Management of Chemical Substances



Eddie Ward
Group Quality Assurance,
NSK Europe Ltd.

In Europe, the REACH regulations mandate the registration of designated substances with the European Chemicals Agency (ECHA) in order to ensure safety-related information for chemical substances is tracked and to assure their rigorous management. In the future, use of DEHP and certain other substances will no longer be allowed. NSK Europe Ltd. will respond proactively in cooperation with headquarters in Japan and suppliers to ensure that we adapt to this smoothly with no impediment to our business.

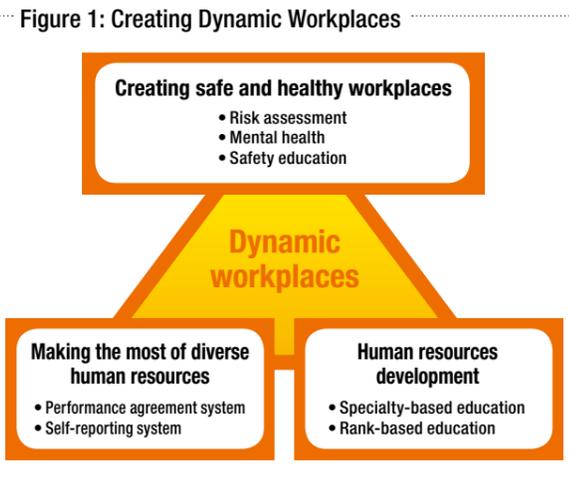
Creating Dynamic Workplaces

Trends As globalization advances, there are more and more opportunities for exchange among people of different races and nationalities. It has never been more important to work together to achieve harmony and mutual benefit for all countries and regions, and the basis of this must be deeper mutual understanding. Companies, for their part, must create workplaces where employees respect the diverse cultures and practices of different countries and regions, embrace diversity in the workforce, and can work safely, with vitality, and with sensitivity to the unique characteristics of the local area.

NSK's Approach **Creating Workplaces where Employees Feel Job Satisfaction**

The NSK Group sees human resources as the foundation of its business. This is why the Group strives to create work environments where employees can work enthusiastically and enjoy a sense of job satisfaction. The Group also works constantly to raise up the next generation of human resources who will help lead the Group into the future. The NSK Group also supports the growth and self-improvement efforts of employees who wish to develop themselves and show initiative in their thoughts and actions. The Group is committed to:

- Maintaining safe and healthy workplaces;
- Making the most of diverse human resources; and
- Providing opportunities and venues that foster the growth of self-motivated employees.



Mid-Term Goals **Fostering Globally Minded Human Resources and Promoting Diversity**

Global expansion of business activities begins in workplaces where employees with diverse values can play an active role and select from among a variety of working styles. Aiming to make the most of its diverse human resources, the NSK Group is stepping up its diversity initiatives, including: an employment system for people with disabilities; recruiting of outstanding human resources regardless of their nationality; a re-employment system for retirees; and childcare/nursing care support systems. The Group is also building a worldwide education system to enable continuity when transferring technology and skills within the development and design, production, and other departments.

FY2009 Activities **Adopting Risk Assessment and Creating Safe Workplaces**

In fiscal 2009, the NSK Group began undertaking risk assessments for safety and health and launched new campaigns to improve safety in plants. It also made a special effort to employ more persons with disabilities as part of its diversity initiatives. The Group also moved forward with measures to establish and encourage use of childcare, nursing care, and other programs. In addition, the Group also organized various training programs to promote awareness of ethics, including respect for human rights and basic rights at work.

FY2009 Highlights

Employees from Around the World Travel to Japan

NSK welcomes employees from its global business sites to Japan so that they can study NSK's management philosophy, technology, and skills first-hand. In fiscal 2009, several dozen people visited from China, Korea, India, Brazil, and other locations. They improved their skills while working side by side with staff in Japan.



Photo 1: Employees from around the world at work at the Fujisawa Technology Center

The NSK Group is also expanding educational activities outside Japan. The NSK Institute of Technology (NIT), established in 2007, conducts technical education programs outside Japan based on a common Group-wide curriculum.



Photo 2: NIT training session in India



Photo 3: Certification Ceremony at NIT training session in Thailand

Going forward, the NSK Group will continue working to globalize its human resources development. Efforts will include training sessions for newly selected leaders and activities to transfer manufacturing technology and skills led by the NSK Manufacturing Education and Training Center, established in 2005.

Site-Driven Safety and Health Activities

Each plant in the NSK Group has established an Occupational Safety and Health Action Plan and is working to improve safety awareness at the production site. The Fukushima Plant, for instance, has a safety activity management board set up to prevent accidents by conveying information to the entire workplace through timely posting of acts that were felt during work to be dangerous.

In addition, special equipment is used in training sessions to foster a healthy dread of accidents involving being pinched by or dragged into machinery, in order to make employees more safety-conscious. Cross-functional safety audits, in which safety personnel from one site inspect another, will be continued. Examples of situations in which accidents could occur will be identified, and risk assessments continued in order to devise measures that will prevent the occurrence of accidents.

In fiscal 2009, occupational accidents within the NSK Group were reduced by 34% compared to fiscal 2008.



Photo 4: Safety activity management board

Facilitating Employment for People with Disabilities

For people with disabilities who are interested in working, the NSK Group provides opportunities for qualified candidates to work in a setting where they can play a helpful role in society. In fiscal 2008, NSK established a special subsidiary called NSK Friendly Services Co., Ltd., on the premises of the Fujisawa Plant in an effort to facilitate employment for people with disabilities. As of the end of March 2009, the Group's employment rate for persons with disabilities was 1.8%, the legally mandated rate in Japan.

NSK Action

Creating Safe Workplaces as an Assistant Instructor in the "Safety Dojo"



Hirobumi Tsubata
Administration Section,
Soja Plant,
NSK Steering Systems Co., Ltd.

Our plant has run a program called the "Safety Dojo" since fiscal 2006. This is a training program implemented every year for all employees at this plant. Participants in the Safety Dojo conduct drills based on examples of past accidents while operating real equipment so that they can feel the dangers lurking in the workplace. As an assistant instructor in the Safety Dojo, I will continue working to create a workplace where everyone can work with confidence and security.

Encouraged by Both Company and Home



Yasuko Kuramoto
Industrial Machinery Bearing
Technology Center,
NSK Ltd.

I work on product design. Every day I am expected to deliver the highest level of accuracy at work and also keep up with my rambunctious kid at home. When I have to take time off because my child has caught a cold, I feel supported by my supervisors and colleagues. I am thankful for a work environment that allows me to build my own career. Phrases like "work-life balance" imply you're stuck between a rock and a hard place, but for me work and home life both give me a feeling of satisfaction.

Working with Local Communities

Education Support for Future Generations

All the companies of the NSK Group are committed to community involvement. At business locations around the world, the NSK Group's employees work closely with their local communities and support the education of the next generation.



UK Peterlee Plant



The NSK Peterlee Plant undertakes a variety of community contribution initiatives together with local industrial organizations about once a month.

Instructors Dispatched to Schools

Every year the company sends instructors from the plant to local schools to encourage students' interest in engineering and to invite them to participate in a work-study experience where they will have a chance to think about their future in the world of work.

Trade Fair Support

The plant helps support a local trade fair and participates in it together with suppliers.

Korea NSK Korea Co., Ltd.



Scholarships and Donations

As a member of its local community, NSK Korea Co., Ltd., provides scholarships, makes donations, and undertakes other initiatives to foster community sustainability and growth. In fiscal 2009, the company awarded scholarships to 30 students and made donations to three welfare establishments. Employees visited an orphanage, and encouraged the children there to have hope for the future.



Visiting an orphanage

Japan Saitama Plant



Workplace Experience for Students

The Saitama Plant offers an internship program designed to give local students opportunities to learn through work experience. In fiscal 2009, the plant accepted a total of nine high school and junior high school students for a workplace experience program. The students did as good a job as employees on lines, with a lot of work requiring standing. The students enjoyed an experience that will be useful in their future careers.



Experiencing packaging work

USA Franklin Plant



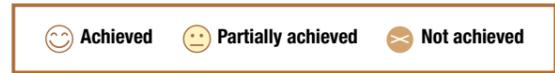
Charity Event Contributes to Cancer Research

The NSK Franklin Plant participates in the Relay for Life, an annual event that raises money for cancer research. During the event, teams from local businesses walk in a relay format around a track for 24 straight hours, and then collect pledges made by sponsors. Other activities include fund-raising walks, motorcycle rides, races, garage sales, and auctions. In 2009 the Franklin site raised \$9,000 for cancer research.



At the round-the-clock Relay for Life

Fiscal 2009 CSR Activity Performance and Fiscal 2010 Targets



Below is a report on the performance in achieving targets set in the *CSR Report 2009*, as well as fiscal 2010 targets established as priority issues or new challenges.

FY 2009 target	Performance in FY 2009	Evaluation	Page	FY 2010 target
Management Structure Supporting Sustainable Growth				
Maintain the effectiveness of internal controls over financial reporting and standardize them Group-wide.	Ensured continued assessment of internal controls as "effective." Continued standardizing controls Group-wide and expanded their application to business sites newly covered by internal controls	☺	p.13 — p.15	<ul style="list-style-type: none"> Accelerate the development, improve ment, and rollout of the <i>NSK Group Business Standards</i> Further standardize and streamline internal controls and expand their application to business sites newly covered by internal controls Enhance education and training on CSR, compliance, and information security Further strengthen the BCP Strengthen review of transactions occurring at bases outside Japan against the Security Export Management Standards
Roll out the <i>NSK Group Business Standards</i> to Group companies outside Japan	Established a system for ensuring the properness of business globally using the <i>NSK Group Business Standards</i> during internal audits	☹		
Roll out the revised NSK Code of Corporate Ethics to Group companies and conduct training sessions	<ul style="list-style-type: none"> Rolled out the revised NSK Code of Corporate Ethics and its Guidebook to Group companies Provided e-learning in Japan based on the above content 	☺		
Roll out the Security Export Management Standards to Group companies in and outside Japan	Created systems at each site for rolling out the Security Export Management Standards	☹		
<ul style="list-style-type: none"> Continue drills and strengthen response measures in preparation for a major earthquake Improve prevention measures against new strains of influenza and start establishing a BCP 	<ul style="list-style-type: none"> Checked progress of response measures in preparation for a major earthquake Rolled out measures against new strains of influenza and started establishing a BCP 	☺		
Enhance information security training (training for the Group companies outside Japan, training for mid-year hires, separate training by occupation)	Created a new training program on information security for mid-year hires and provided separate training by occupation	☺		
Creating Quality to Earn the Confidence of Society				
Create educational tools for users in multiple languages	Revised e-learning tools about bearing basics for users in five languages and added two new languages	☺	p.16 — p.19	<ul style="list-style-type: none"> Train special process auditors outside Japan Create educational tools for users in multiple languages Roll out <i>NSK Supplier CSR Guidelines</i> to suppliers
Expand the scope of activities to improve business quality	Implemented initiatives to improve business quality in five administrative departments	☺		
Establish Socially Responsible Procurement Guidelines (tentative name) and roll out to suppliers	<ul style="list-style-type: none"> Established <i>NSK Supplier CSR Guidelines</i> (Japanese) Rolled out the guidelines to selected suppliers as a trial 	☺		
Environmental Management				
<ul style="list-style-type: none"> Maintain zero oil-leak accidents to outside company premises Establish Product Chemical Management Committees at all plants outside Japan 	<ul style="list-style-type: none"> Maintained zero oil-leak accidents to outside company premises Established Product Chemical Management Committees at all subject plants 	☺ *	p.20 — p.21	Maintain zero oil-leak accidents to outside company premises
Creating Environmentally Friendly Products				
<ul style="list-style-type: none"> Develop environmentally friendly products and technologies Evaluate CO₂ reductions of NSK products during use 	<ul style="list-style-type: none"> Developed 14 environmentally friendly products and technologies Estimated CO₂ reductions from bearings used in wind power generators and hybrid vehicles (estimated CO₂ reductions [pages 5 and 7]) 	☺	p.22 — p.23	Develop environmentally friendly products and technologies

FY 2009 target	Performance in FY 2009	Evaluation	Page	FY 2010 target
Global Warming Countermeasures				
<ul style="list-style-type: none"> Reduce CO₂ emissions in Japan per production unit by 9.6% (base year: FY99) Reduce CO₂ emissions in Japan to a level below FY06 	<ul style="list-style-type: none"> Reduced CO₂ emissions in Japan per production unit by 4.8% (base year: FY99) Reduced CO₂ emissions in Japan by 75,000 tons below the FY06 level 	☹	p.24 — p.25	<ul style="list-style-type: none"> Reduce CO₂ emissions in Japan per production unit by 10.5% (base year: FY99) Maintain CO₂ emissions in Japan at a level below FY06
Measures for Resource Conservation and Recycling				
<ul style="list-style-type: none"> Continue to maintain zero emissions in Japan Maintain waste recycling rate of 98% or more in Japan 	<ul style="list-style-type: none"> Maintained zero emissions in Japan Achieved waste recycling rate of 99.3% in Japan 	☺	p.28 — p.29	<ul style="list-style-type: none"> Continue to maintain zero emissions Maintain waste recycling rate of: 98% or more in Japan 90% or more outside Japan
Reducing Use of Environmentally Harmful Substances				
<ul style="list-style-type: none"> Conduct on-site audits at suppliers that require management Start operation of green procurement management system (two plants in ASEAN) 	<ul style="list-style-type: none"> Conducted on-site audits at 29 suppliers that require management in Japan Started operation of green procurement management system at four plants in Asia 	☺	p.30 — p.31	<ul style="list-style-type: none"> In Japan: Replace DEHP plasticizer used in nitrile rubber seals for bearings with alternative substance (20%) Outside Japan: Ascertain supply chain
Creating Dynamic Workplaces				
<ul style="list-style-type: none"> Enhance the content of and expand the target areas of self-development training Enhance e-learning training programs 	<ul style="list-style-type: none"> Implemented self-development training and expanded the target areas Started operating e-learning courses on CSR, compliance, and information security every other month to enable timely training of new hires 	☺	p.32 — p.33	<ul style="list-style-type: none"> Develop an educational system for global human resources Roll out risk assessment to all plants
Establish a model line and implement comprehensive risk management that contributes to health and safety at plants	Established a model line; started risk assessment at some plants	☹		
Working with Local Communities / Education Support for Future Generations				
Create a model to provide information about plant initiatives to local communities	Began disclosing information about initiatives undertaken by each site via the Company website	☹	p.34 — p.35	<ul style="list-style-type: none"> Expand implementation of children's science class program Share information on initiatives among business sites
Develop a children's science class program that meets needs better	Created a new program that can accommodate more children	☺	p.38	
Communication with Shareholders and Investors				
Enhance IR events (update information for investors [in English and Japanese] on the Company website)	Completed update of the Company website (in Japanese and English)	☺	—	<ul style="list-style-type: none"> Promote investor understanding of NSK's mid-term plan and its progress

* There was a violation in which sewage discharge slightly exceeded standards.

Initiatives at Business Sites

The NSK Group's business sites are engaged in environmental protection and social contribution activities worldwide.

Japan

● Ishibe Plant, NSK Ltd.

- Products: Automotive products (hub unit bearings, ball bearings), other
- ISO 14001 certification obtained: October 1998

Environmental initiatives

The Ishibe Plant has taken measures to prevent soil and groundwater pollution from oil leaks. In fiscal 2009, the plant worked to convert to new fuels, and then removed an underground tank that was no longer needed.

Social contribution initiatives

- Employees serve as crossing guards for children going to and from school
- Offered work experience program for a nearby junior high school



Tank dug up

Europe

● Kielce Plant, NSK Bearings Polska S.A.

- Products: Industrial machinery bearings (ball bearings), other
- ISO 14001 certification obtained: August 2004

Environmental initiatives

The Kielce Plant improved waste recycling, achieving a recycling rate of 100% for wooden packaging and corrugated paperboard packing in fiscal 2009.

Social contribution initiatives

- Participated in joint fire drills with local authorities and companies
- Provided environmental education for secondary school students



Joint fire drill

The Americas

● Clarinda Plant, NSK Corporation (United States)

- Products: Automotive products (ball bearings), other
- ISO 14001 certification obtained: July 2002

Environmental initiatives

The Clarinda Plant has started replacing the refrigerant in its heating and cooling units in order to save energy and reduce the use of ozone-depleting chlorofluorocarbons (CFCs). The plant will continue working steadily to replace the refrigerant in this equipment.

Social contribution initiatives

- Raised funds for earthquake victims in Haiti
- Donated Christmas presents to a welfare facility
- Supported extracurricular activities at a local school



Donations sent to victims of the earthquake in Haiti

China

● Kunshan Plant, Kunshan NSK Co., Ltd.

- Products: Industrial machinery bearings (ball bearings), automotive products, other
- ISO 14001 certification obtained: December 2003

Environmental initiatives

The Kunshan Plant has taken energy saving measures, including outfitting refrigeration pumps with inverters. In fiscal 2009, the company was designated an Outstanding Energy Saving Company by the city of Suzhou, Jiangsu Province.

Social contribution initiatives

- Scholarships for local students
- Donation sent to flood disaster area



New refrigeration pump inverters and notification of recognition as an energy-saving company

Third-Party Opinion

As last year, NSK asked Mr. Eiichiro Adachi of the Japan Research Institute, Limited to provide a third-party opinion of this report.



Eiichiro Adachi
Research Chief,
Japan Research Institute, Limited

Profile: Mr. Adachi graduated from Hitotsubashi University's Department of Economics and is currently the head of the ESG Research Center at the Japan Research Institute, where he conducts industrial surveys and corporate evaluations from the perspective of corporate social responsibility, with a focus on countermeasures to environmental concerns. His published works include *Introduction to Environmental Management* (in Japanese, published by Nikkei Publishing Inc.). Mr. Adachi is a member of the Japan Standards Association's ISO/SR domestic committee and was a Japan expert on the ISO 26000 Working Group until May 2009.

As I have given financial institutions information on companies so that they can make socially responsible investments, I am providing a third-party opinion of the NSK Group's CSR activities, based on the understanding I have gained from this report.

Last year, I asked for enhanced disclosure on matters relating to eco-efficiency indicators, CO₂ emission reduction targets, and the resolution of problems in developing countries. I am pleased to see that these issues were addressed to a certain degree.

The majority of the Group's sales by region were outside Japan in the fiscal year ended March 31, 2010. Already 54% of the Group's employees live outside Japan. The NSK Group is both in name and reality at the point of taking a huge leap as a global enterprise. In light of this, the scope of the report includes operations outside Japan and the "NSK Action" columns proactively introduce examples from sites outside Japan. Nevertheless, as a whole the content seems to be dominated by initiatives, targets, and results in Japan.

For example, in terms of the environmental aspects of CSR, material balance was ascertained only for Japan and no target was set for total CO₂ emissions other than in Japan. Likewise, no disclosure was made as to whether the release and transfer of environmentally harmful substances had decreased. In terms of the social aspects of CSR, although the globalization of human resources development was described, no mention was made about the results of fostering diversity at sites outside Japan or about clear personnel programs

Responses to Mr. Adachi's main opinions of the NSK CSR Report 2009

Opinion	NSK's response	Page
Distinguish eco-efficiency indicators between the stages of production and use	NSK Eco-efficiency Indicators (Neco) do not include assessments relating to production. In the future, NSK will consider conducting LCAs for each product category and assessing the environmental impact of the production stage.	p.22
Disclose eco-efficiency indicators for products used in wind power generators and railway vehicles	Calculated the CO ₂ reduction effect during the usage of products employed in wind power generators and hybrid vehicles.	p.5, 7
Compare CO ₂ emissions to fiscal 1990	Fiscal 2009 CO ₂ emissions were estimated at 101% the level of fiscal 1990.	p.24
Establish CO ₂ reduction target for 2020 and implementation scenarios	Currently being considered.	-
Expand efforts to help solve problems of poverty and conflict in developing countries	Pushing forward with engineer training in and outside the Company, and the complete localization of operations. Increasing the rigor of the export management system for products and technology in an effort to prevent trade that could lead to manufacture of weapons.	pp.10-11 pp.8-9 p.15

that meet the expectations of employees outside Japan. Further, while the report described the strengthening of the management system in Japan for efforts to prevent the export of products and technology that could be used to manufacture weapons, the situation at sites outside Japan should also be a point of focus. Going forward, I would like to see the NSK Group put greater effort into the globalization of its CSR activities and CSR reports.

I find myself in accord with the NSK Group's view of CSR, which is that its products support the reliability, safety, and energy efficiency of the machines into which they are incorporated. I commend NSK's introduction of the Neco indicators and the disclosure of figures in this report. I hope that in the future the company will report whether the figures for product value and environmental value are improving over time. In addition, since NSK is considering a CO₂ reduction target for 2020 and implementation scenarios, I suggest that it create targets for the effects of reduced energy consumption during product use by customers.

Finally, it is disappointing that the section on working with local communities and educational support for future generations ended in a list of items. I hope to see mention made of the continuity and effects of initiatives, with a focus on the perspective of community participation.

These comments do not offer any conclusion as to whether the data in this report was accurately ascertained and calculated in accordance with generally recognized criteria for preparing environmental reports, or whether all important issues have been addressed without omission.

Response to Mr. Adachi's Third-Party Opinion



Toshihiro Uchiyama
Senior Vice President
Corporate Planning Division HQ-Head
Responsible for IR & CSR Office

Thank you for your valuable opinion again this year.

We moved aggressively to adopt the new NSK Eco-efficiency Indicators (Neco, page 22) in response to the opinion you provided two years ago, encouraging us to report annually on the results of technical innovation of products. This effort has been highly regarded and resulted in NSK winning an environmental efficiency award last year. We will continue striving to clearly explain to stakeholders how NSK's products are benefiting the environment and how we are working to improve them.

In line with the global expansion of our business, we will continue to improve the various initiatives we are taking at business sites outside Japan. We will also strive in future reports to enhance the disclosure of information on the matters you indicated, including the promotion of diversity, personnel programs that meet the expectations of employees, coexistence with local communities and educational support for future generations.

Our CSR is ...

A CSR perspective allowed me to see the connection between my work and society, something I didn't understand when I was just focused on my job at the plant.

Taira Sakai Japan



completing our tasks without compromise



sharing of happiness



live a low-carbon life for our earth



pleasure to go with society

JAPAN / ASEAN



daily effort



dedication



saving energy



creating a better future

I would like the company and individuals to have Concern, to Serve by providing service through time and resources, and to Reciprocate by giving back to society/community.

Kiyoharu Miyoshi Shingapore

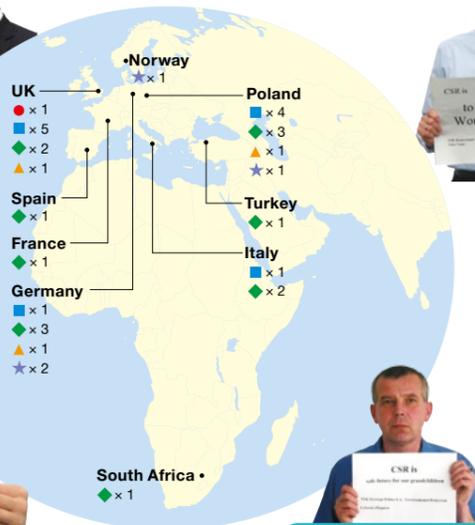


Director of Administration Kiyoharu Miyoshi

EUROPE



our responsibility towards people and environment - NSK



to bring the World together



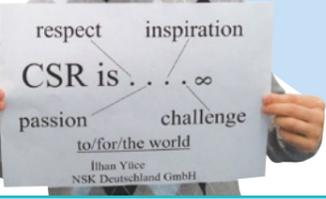
a step to a better future



safe future for our grandchildren

I am an engineer. I will continue taking up the challenge of contributing to the world, society, and customers by valuing creativity and passion.

Ilhan Yuce Germany



AMERICAS



BONNIE L and PETE J



Amy Lawrence - NSK Canada Inc.



Head Office



I work in Customer Service. As the face of NSK, it is an important position... where the company comes into contact with customers. I want to make suggestions that will benefit society and customers.

Paola D'Rugama Mexico

Corporate Overview (as of March 31, 2010)

Company name	NSK Ltd.	Employees	Consolidated: 24,633 Non-consolidated: 5,932	Net sales (Year ended March 31, 2010)	Consolidated: 587.6 billion yen Non-consolidated: 388.6 billion yen
Head office	Nissei Bldg., 1-6-3 Ohsaki, Shinagawa-ku, Tokyo, 141-8560, Japan	Breakdown of employees by region (consolidated)	Excluding temporary employees	Breakdown of net sales by region (consolidated)	Based on location of customers
Established	November 8, 1916				
Capital	67.1 billion yen				
Group companies	Within Japan: 23 Outside Japan: 68				
Shareholders	26,046				

Major SRI Indexes

Dow Jones Sustainability Indexes
http://www.sustainability-indexes.com

FTSE4Good Sustainability Indexes
http://www.ftse.com/Indices/FTSE4Good_Index_Series/index.jsp

Ethibel Investment Register
http://www.ethibel.org/index.html

Morningstar Socially Responsible Investment Index
http://www.morningstar.co.jp/sri/index.htm

(As of March 31, 2010)

Your Opinions Are Invited

Thank you for reading the NSK Group's CSR Report 2010. In order to further improve our CSR activities and the quality of this report, NSK would like to receive your opinions and impressions. Please take a moment to fill out the following questionnaire or visit the following website.

WEB www.nsk.com > Sustainability > CSR Reports > <http://www.nsk.com/sustainability/voice/>