

Denka Group CSR REPORT 2015

Possibility of Chemistry.

Denka Company Limited
www.denka.co.jp/eng



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Possibility of Chemistry.



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Editorial Policy

On May 1, 2015, Denka celebrated the centennial of its founding. In line with our corporate philosophy, "Creating valuable things that benefit society from resources with advanced technologies," we have formulated the corporate slogan "Possibility of Chemistry" while signaling a new start by changing our company name from DENKI KAGAKU KOGYO KABUSHIKI KAISHA to Denka Company Limited on October 1, 2015.

To reinforce our operating foundation in anticipation of the next 100 years, we have been implementing the Denka100 management plan, which we launched in April 2007. In step with changes in the economic climate and other factors, we revised the plan and reinforced it with new growth strategies in April 2013, with the target year set at fiscal 2017.

The Special Feature section of the *Denka Group CSR Report 2015* presents a history of our hydroelectric power operations, which have played a crucial role in the creation of our business foundation (pages 6 and 7). Also contained in the report is an introduction to the Denka Principles, which we formulated in April 2015 as a guide for employee business conduct, and a discussion of the meaning behind the new corporate slogan "Possibility of Chemistry" (pages 10 and 11).

In addition, the report goes into considerable depth about the four business divisions' strategies, with particular focus on progress under new growth strategies related to overseas expansion, as well as on each business's activities aimed at creating new value (pages 14 to 21).

Also provided is a look at our efforts in the area of safety, with reports on the status of countermeasures undertaken to prevent accident recurrence, focusing on the two major accidents experienced in fiscal 2013, namely, a heat blast from an electrical furnace at the Omi Plant and a fire from a distillation tower of the Chiba Plant's CM-3 styrene monomer production facility. We have received third-party verification of our efforts backed by positive comments from an external specialist. Our Basic Policy for Workplace Safety, Health, Security and Disaster Prevention, formulated on April 1, 2015, to clarify our uncompromising stance on safety and eliminating occupational accidents and disasters, is also furnished in these articles (pages 28 to 31).

In addition, with a view to stepping up our CSR activities, we focused on improving the process followed in preparing this report while incorporating new initiatives. Specifically, we:

- Discussed processes for value creation and examined business models with representatives from the four business divisions, thereby improving the content of the report based on the principle of materiality, and
- Worked with a CDP* reporting task force to raise employee awareness of environmental activities. Although the results of this collaboration have yet to be reflected in our CSR report, efforts are now under way to disclose such information as Scope 3 GHG emissions.

* Carbon Disclosure Project (CDP)

Coverage

- Fiscal 2014 (April 1, 2014, through March 31, 2015)
N.B., this report includes additional information on some initiatives undertaken subsequently in fiscal 2015 while presenting numerical targets for and performance statistics from the past several fiscal years.

Scope

Unless stated otherwise, the environmental data presented in this report covers the business sites of Denka and key affiliates listed below.

- Business sites: Six production sites (Omi, Omuta, Chiba, Shibukawa, Ofuna and Isesaki) and four R&D institutes (the Advanced Technologies Research Institute, the Life Innovation Research Institute, the Infrastructure & Solutions Development Research Institute at the Denka Innovation Center and the Polymer & Processing Technology Institute)
- Key affiliates: Denal Silane Co., Ltd. and Denak Co., Ltd. at the Omi Plant as well as TOYO STYRENE Co., Ltd., and Taiyo Vinyl Corporation at the Chiba Plant

Guidelines

- The G4 Sustainability Reporting Guidelines of the Global Reporting Initiative (GRI) (This report includes data related to disclosure standards set out in the GRI Sustainability Reporting Guidelines. However, the report is not fully compliant with these guidelines.)
- The Environmental Reporting Guidelines 2012 of Japan's Ministry of the Environment

Website-Only Content

For CSR reporting, Denka utilizes both printed booklets and online references that are prepared in PDF format and posted on its website. While the former present the latest examples of Denka's initiatives aimed at achieving sustainable growth, the latter cover information on its long-standing CSR activities. In addition, the Global Reporting Initiative (GRI) Content Index is attached to the web-based references to the *Denka Group CSR Report 2015*.

Please see also Site Reports (posted on the website in PDF format) for detailed information on each business site and affiliate.

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Celebrating the Centennial of Our Founding

Remaining Focused while Flexibly Pursuing Sustainable Growth in an Evolving Business Environment



Looking Back Over the Last 100 Years

In 2015, we celebrated the centennial of our founding. As we mark this milestone, we would like to take the opportunity to express our sincere gratitude to all of our stakeholders, without whose encouragement and support we would not have thrived.

Denka's inauguration dates back to 1915, when the Hokkai Carbide Plant launched by Dr. Tsuneichi Fujiyama, Japan's pioneering chemist in calcium carbide production, was reorganized into DENKI KAGAKU KOGYO KABUSHIKI KAISHA (nicknamed Denka) to manufacture and market calcium carbide and calcium cyanamide. Through the provision of calcium cyanamide fertilizer, Denka helped improve farmland soils and increase crop yields, and the Company took on various technological challenges over the years in the interest of facilitating the modernization of agriculture throughout Japan.

Since the Company's inception, Denka's management has been engaged in robust dialogue with customers and wholeheartedly addressing challenges with an unwavering commitment to helping resolve issues confronting society through chemistry and manufacturing. The spirit of our predecessors is encapsulated in our current corporate philosophy "Creating valuable things that benefit society from resources with advanced technologies," and this spirit has, in turn, led to the creation of businesses that range from chloroprene rubber, synthetic resins, cement, special cement additives and electronic materials to pharmaceutical products. Moreover, this spirit constitutes a crucial part of our uncompromising and sincere corporate culture dedicated to the pursuit of higher functionality and quality.

In 2015, we formulated the new corporate slogan "Possibility of Chemistry" to better convey our corporate philosophy to the general public in a more concise manner. The slogan is intended to communicate Denka's founding spirit to future generations.



Denka President Shinsuke Yoshitaka delivering a greeting at a commemorative centennial event

Initiatives to Prevent Major Accidents and Maintain Worksite Safety

In 2013, we experienced two major accidents, namely, a heat blast from an electrical furnace at the Omi Plant and a fire during facility demolition carried out at the Chiba Plant. Drawing lessons from these accidents, we have been implementing steps to prevent recurrences while structurally stepping up our safety and security measures by utilizing external certification systems, including those stipulated by Japan Society for Safety Engineering, as well as advice from outside experts.

In April 2015, we established our Basic Policy for Workplace Safety, Health, Security and Disaster Prevention to help all Group members adopt a fundamental approach that puts the utmost priority on safety. Also, these policies are intended to provide a public statement on our commitment to becoming a company that is more trustworthy and capable of eliminating accidents and disasters. To fulfill our social responsibilities as a chemical company, I myself will spearhead safety activities while chairing the Safety Measures Headquarters.

Promoting the Denka100 Management Plan New Growth Strategies

Due to rapid globalization and the advance of information communication technologies, the business environment is changing quickly and leaving companies not ready to adapt to evolving market needs and economic conditions behind. In line with our aim to secure sustainable growth over the next 100 years, we have established the Denka100 management plan, under which we are promoting new growth strategies and implementing concrete measures.

To create the most optimal production network, we established new plants in Vietnam and China to produce VINI-TAPE (vinyl chloride-based adhesive tape) and ALSINK (thermal conductive plate for electronic circuits), respectively. Moreover, we decided to acquire the chloroprene rubber business of DuPont, a U.S.-based chemical company that was the first in the world to commercialize chloroprene rubber. Using this big decision as a springboard, we will further strengthen our chloroprene rubber business, solidifying our top global market position for this product.

In addition, we are striving to focus our management resources on new growth drivers. Thus far we have established regional headquarters for the special cement additive business in Shanghai and Singapore to capture burgeoning infrastructure development demand in China and Southeast Asia while launching production bases in Tianjin and Malaysia. Moving ahead with next-generation

product development, we have acquired Icon Genetics GmbH, a Germany-based biopharmaceutical R&D company. This acquisition should help speed the development of new manufacturing methods for diagnostic reagents and vaccines and to create such novel pharmaceutical products as norovirus vaccines.

In April 2014, we completed the Denka Innovation Center main building to facilitate open innovation aimed at contributing to a better future society. This facility provides a place for robust interaction between the Company and external organizations and business partners from around the world, and there are a number of collaborative projects under way at the site intended to maximize the possibility of chemistry and create R&D results that embody our new corporate slogan.

Promoting Environmental Management

Over its 100-year history, Denka has accumulated a wealth of experience and know-how in the construction and operation of hydroelectric power generation facilities and the development of environment-friendly technologies that help reduce the energy consumption of manufacturing processes. This arsenal of strengths will, we believe, constitute a key to promoting environmental management over our next 100 years.

The prevention of global warming and the utilization of clean energy have become crucial management issues for us as our manufacturing facilities are particularly energy-intensive. Furthermore, improvements in yield ratios and energy efficiency will further strengthen our operating foundation as we aim to scrutinize every cost element in line with our growth strategy. Meanwhile, we are transferring calcium carbide manufacturing technology to China with the aim of helping create a better worksite environment and preserving the global environment in a way only Denka can do. We will proactively implement these and other initiatives to make greater international contributions.

Strengthening Corporate Governance

We believe that for businesses to thrive, they must maintain the trust of society through responsible conduct as corporate citizens. No business can thrive outside society. In line with this belief, we obtained the approval of the annual General Stockholders' Meeting held in June 2015 with regard to revisions in our Board of Directors' composition, as part of our initiatives to strengthen corporate governance. Specifically, we increased the number of outside directors to three while decreasing the total number of directors by two. Also, we appointed a Chief Compliance Officer in July 2015. In these ways, we are striving to enhance the transparency and soundness of management.

Our Policies on Shareholder Returns and Strategic Investment

We established our Policy on Shareholder Returns in line with our determination to return profits yielded by initiatives executed under the Denka100 management plan to our shareholders. Simultaneously, we set a budget for M&A and other strategic investments aimed at further growth. We will strive to ensure our financial soundness while maximizing shareholder returns and resources for forward-looking strategic investments, with the goal of swiftly achieving an ROE of 10% or greater.

Developing Human Resources and a Favorable Working Environment for Sustainable Growth

We recognize that human resources are the foundation for achieving sustainable corporate growth. We therefore consider that it is

essential to help each worker realize his/her full potential, develop a favorable workplace in which they can find their job rewarding and upgrade our personnel system in step with social changes.

With these factors in mind, we are enhancing our overseas training programs for younger employees while stepping up initiatives to help senior engineers pass on our technological heritage to a younger generation. We are also revising our personnel systems to reward highly motivated employees and offer them greater career opportunities. Moreover, we are striving to cut overtime work, systematically assist women with their pursuit of higher careers and improve our mental-health countermeasures.

Establishing "Denka Principles"

Today, a significant number of Denka Group employees are engaged in business operations outside of Japan. Given this, we established the Denka Principles in April 1, 2015, with the aim of clarifying our fundamental stance for business conduct, basic precepts that should be always referred to by employees, and the way we relate to society.

Specifically, these principles represent our commitment to putting the utmost priority on safety, giving due consideration to the environment, creating new value through manufacturing and remaining a company worthy of the trust of society. We ask every employee to take heed of and take action in line with these principles. With a set of values established to serve as a cornerstone for corporate activities and to be shared throughout the Group, we sincerely hope that each employee takes pride in his or her duties as a Denka Group member and achieves success in his or her career.

Taking a New Step as Denka Company Limited

Based on my observations of employees pursuing challenging targets, I am confident that our corporate culture has become more ambition-oriented. However, we have yet to accomplish the goals set forth in the Denka100 management plan and there remain many issues to be addressed as we work to create a more flexible and robust enterprise capable of achieving growth regardless of external factors. We must tackle these challenges by rallying the strength of all Group employees.

We therefore changed our company name to Denka Co., Ltd. on October 1, 2015. Undertaken during this milestone year, this move was intended to announce our renewed commitment to pursuing further growth into the future. Since the new appellation is more easily pronounced, it is expected to help to further enhance our name recognition among stakeholders. Under the new company name, we will strive to fulfill our responsibilities as a corporate citizen, thereby living up to the expectations and trust of society.

We sincerely ask for your ongoing support for our Group operations.



Group photo of all Denka Innovation Center staff

History of Denka's Hydroelectric Power Generation

Denka's business growth over its 100-year history has gone hand in hand with its development of a robust network of hydroelectric power plants.

In addition to carburization materials and high-quality limestone, the production of calcium carbide requires a steady source of power to run the electrical furnaces used. Our hydroelectric power generation facilities are therefore a crucial component of our operating foundation centered on electrochemistry, as indicated by our original company name, DENKI KAGAKU KOGYO (which literally translates as Electrochemical Industry).

Having just celebrated the centennial of our founding, in the following section we explore the history of our hydroelectric power operations from the very beginning.

Why Hydroelectric Power Generation Been So Crucial to Denka's Development

In 1901, Dr. Tsuneichi Fujiyama, one of Denka's founders, became the first in Japan to manufacture calcium carbide. To do so, he utilized surplus electricity from the Sankyozawa hydroelectric power plant* run by Miyagi Boseki Dento Kabushiki Kaisha in Sankyozawa, Miyagi Prefecture. Based on this experience, Dr. Fujiyama then launched the Hokkai Carbide Plant in Tomakomai, Hokkaido, in 1912. Fed by surplus electricity from the Chitosegawa power plant run by Oji Paper Co., Ltd., this facility was a direct precursor of Denka, which was established in 1915.

The electrical furnace production of calcium carbide requires both a stable supply of low-cost electricity and high-quality raw materials. Given the underdeveloped public electricity supply network in Japan back then, Denka needed to develop its own hydroelectric power generation facilities in order to augment its production capacity and expand business operations.

* Still operating today, the Sankyozawa hydroelectric power plant is the oldest power plant of its kind and is run by Tohoku Electric Power Co., Inc.

Hydroelectric Power Generation Facilities of Our Omi Plant

In 1921, the Omi Plant was founded in the Hokuriku area, where there was ready access to rich limestone reserves and rivers running through hilly terrain that ensured abundant water current for hydroelectric power generation.

That same year, Denka launched the manufacture of calcium carbide at its Omi Plant, having acquired mining rights to limestone mines along with water rights through a merger with Hokuriku Suiden Kabushiki Kaisha and Takasago Suiryoku Denki Kabushiki Kaisha, the latter of which constructed the Kotakigawa Power Plant (Photo 1). In 1923, Denka established the Otokorogawa Power Plant (Photo 2) and in 1926 began purchasing electricity from Kurobegawa Electric Power Company as well. Thus, from the very beginning, Denka strove to secure a sufficient and stable power supply to ensure its ability to accommodate burgeoning demand for fertilizer made using calcium carbide.

However, in 1927 Japan was hit by the Showa financial crisis and this was shortly followed by the Great Depression, which left the world in economic turmoil. For five years, Denka struggled amid a dire business environment, with a drastic decline in fertilizer demand and a surge in electricity rates eroding its operating base. To cope, Denka executed such restructuring measures as downsizing its workforce, reducing its capital and streamlining production processes. Simultaneously, the Company sought to stabilize its electricity supply through participation in the management of Kurobegawa Electric Power Company.

In 1932, Denka successfully became a joint manager of this utility by joining its own electric power generation facilities, along with those of its partner Nihonkai Denki Kabushiki Kaisha (now Hokuriku Electric Power Company), with Kurobegawa Electric Power. This move helped Denka

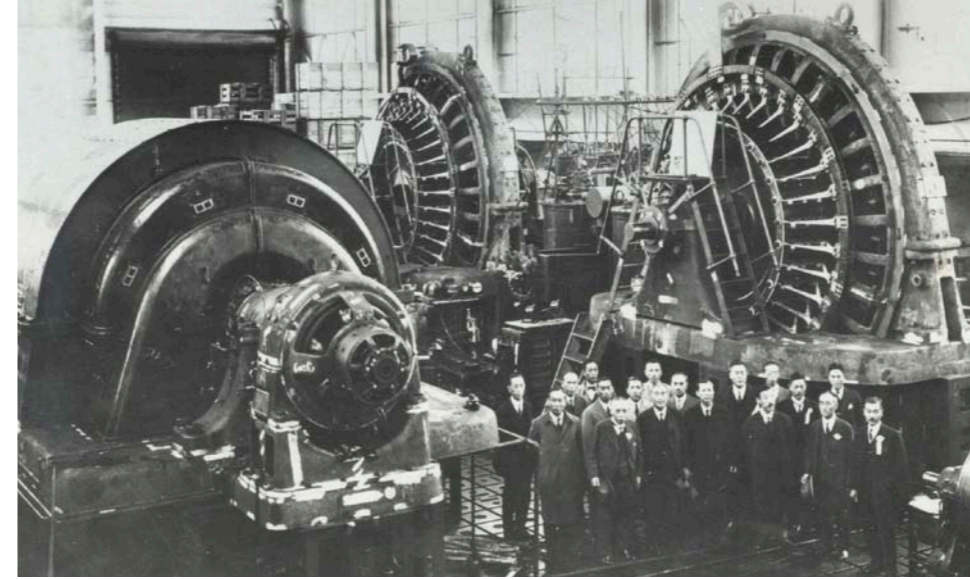
get over the crisis by securing continuous access to electricity. In 1938 and 1939, Denka went on to establish, respectively, the Oami and Omigawa power plants.



1. A photograph of a Francis turbine runner at Kotakigawa Power Plant (taken shortly after the facility's launch)

History of Hydroelectric Power Generation at Our Omuta Plant

Established in 1916, the Omuta Plant was powered by the local utility Kumamoto Denki Kabushiki Kaisha in addition to surplus electricity from Mitsui Mining Co., Ltd. However, if the plant were to expand its operations, it would be essential to secure a more stable and robust energy source. Denka thus resolved to take advantage of the Oyodogawa River in Miyazaki Prefecture and in 1925 established the Oyodogawa Power Plant No. 1, installing transmission lines from Miyazaki to Yatsushiro with the cooperation of local stakeholders. Once the plant was brought online, its maximum output totaled 15,000kW.



3. Oyodogawa Power Plant No. 2 under construction (with then Chairman Ginjiro Fujiwara on the left of the front row)

At the time, plans called for establishing a second hydroelectric power generation facility, with the commencement of construction scheduled for 1927. However, the aforementioned financial crisis hit the country right before the construction kickoff. Despite the harsh business climate, under the leadership of then Chairman Ginjiro Fujiwara, who was determined to accomplish the project even if he had to "offer himself as a collateral for loans," Denka managed to establish the Oyodogawa Power Plant No. 2 (Photo 3) in 1931. Boasting the maximum output of 30,000kW, this facility helped stabilize the Omuta Plant's operations.

During the World War II, however, Denka was forced to contribute the output of these two power generation facilities and their transmission lines to the "National Policy Company" in accordance with a government order. After the war, the Omuta Plant was able to quickly restore its facilities, which had been damaged by airstrikes, but the power plants were not returned to Denka. For 10 years, the consequent

power shortage hindered the Omuta Plant's ability to achieve its full production capacity, forcing it to again downsize its workforce.

After many years of hardship, the Omuta Plant was eventually able to secure a stable electricity supply thanks to the post-war development of electric power generation facilities by public utilities.

In summary, the 100 years of Denka's hydroelectric power generation attest to the importance of stable and low-cost electricity to the establishment of a robust operating foundation.

Building a New Hydroelectric Power Plant

With operational kickoff scheduled for 2018, Denka has been constructing the New Omigawa Power Plant while at the same time conducting preparatory surveys for the construction of the New Himekawa Power Plant No. 6 by Kurobegawa Electric Power Company. We favor a natural inflow type

Hydroelectric Power Plants / Contending with Nature

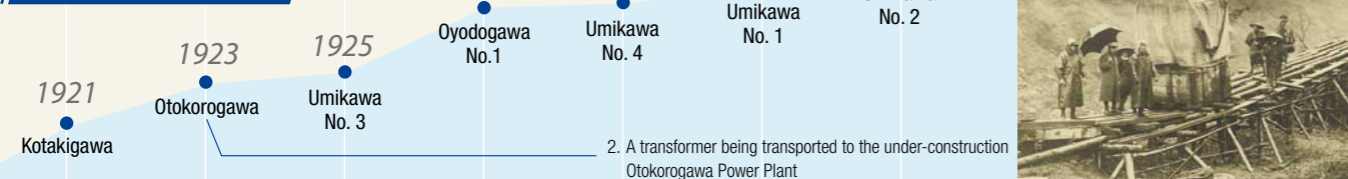
Denka's hydroelectric power generation facilities employ natural inflow type power generation systems that utilize the momentum of water flowing down steep slopes. The maintenance of these facilities sometimes involves dealing with natural disasters, such as floods and heavy snowfalls.

Our facilities have on occasion been hit by mudslides in the wake of rainstorms, with their dams, conduits and hydraulic steel pipes suffering damage. Also, avalanches and heavy snowfalls have occasionally harmed power generation facilities as well as substations and transmission lines. Given this, we remain vigilant to changes in the weather, looking to proactively mitigate risk while continuously enhancing our preparedness to minimize damage in the face of natural disaster.

hydroelectric power generation system for both facilities as this minimizes the impact of hydroelectric power plants on the environment.

In the face of growing calls for the utilization of renewable energy to help curb global warming, Denka will effectively utilize and expand its network of hydroelectric power generation plants while leveraging its diverse know-how and technologies in the energy field. In these ways, Denka will continue to promote the use of clean energy, thereby fulfilling its social responsibility.

History of Our Hydroelectric Power Plants



2. A transformer being transported to the under-construction Otokorogawa Power Plant



The Development of Hydroelectric Power Generation Technologies

Denka has been operating power generation facilities for a long time and over that period has successively upgraded aging generators and turbine runners so that today it boasts a lineup of high-efficiency, cutting-edge models.

As the water volume of rivers varies by season and is affected by weather conditions, the momentum of a given water current is inherently unstable. Moreover, the energy demand of a given production facility may also fluctuate. Therefore, striking the optimal balance between

electricity supply and demand has long been a crucial technological challenge for Denka. One way this challenge has been met has been the development of a centralized system to manage the operation of multiple power generation facilities.

To maximize the efficiency of power generation, Denka takes a flexible approach to the management of its hydroelectric power generation plants, for example, increasing or decreasing water intake to accommodate seasonal changes in water volume.



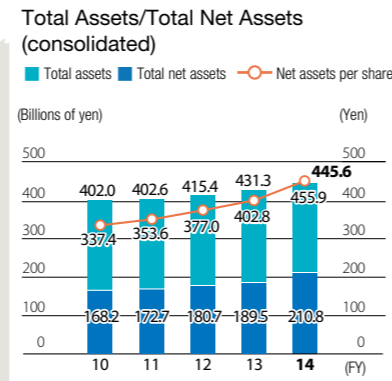
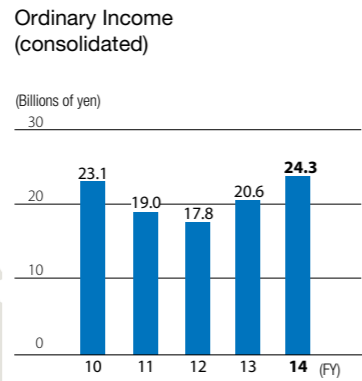
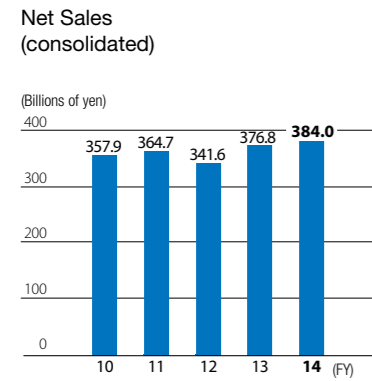
Oami Power Plant concurrently serves as Denka's power generation plant management center

Corporate Profile (as of October 1, 2015)

Name Denka Co., Ltd. **Paid-in Capital** ¥ 36,998,436,962 (as of March 31, 2015)
Established May 1, 1915 **Employees** Consolidated: 5,309
 Of those, domestic: 4,941; overseas: 368
 Non-consolidated: 2,934 (As of March 31, 2015)

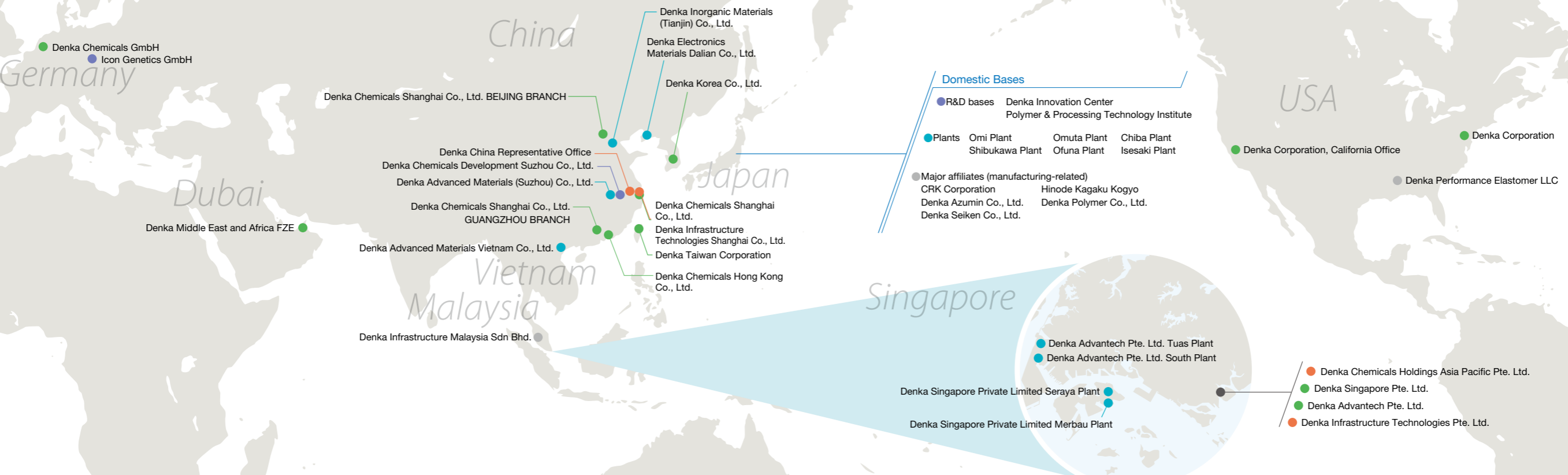
Business Sites **Head Office**
 Nihonbashi Mitsui Tower, 1-1, Nihonbashi-Muromachi 2-chome,
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 Tel: +81-3-5290-5055
Branches
 Osaka, Nagoya, Fukuoka, Niigata, Hokuriku (Toyama), Sapporo,
 Tohoku (Sendai)
Sales Offices
 Nagano, Gunma (Takasaki), Akita, Hiroshima, Shikoku (Takamatsu)
Research Institutes
 DENKA Innovation Center [Advanced Technologies Research
 Institute, Life Innovation Research Institute, Infrastructure & Solutions
 Development Research Institute] (Machida, Tokyo)
 Polymer & Processing Technology Institute (Ichihara, Chiba)

Plants
 Omi (Itoigawa, Niigata), Omuta, Chiba (Ichihara, Chiba and Bibai,
 Hokkaido), Shibukawa, Ofuna (Kamakura, Kanagawa), Isesaki (Isesaki
 and Ota, Gunma)
Overseas Subsidiaries & Offices
 New York, California, Düsseldorf, Singapore, Vietnam, Shanghai,
 Beijing, Guangzhou, Suzhou, Hong Kong, Tianjin, Taiwan, Seoul and
 Dubai
Major Affiliates
 Denka Polymer Co., Ltd. (Koto-ku, Tokyo)
 Denka Seiken Co., Ltd. (Chuo-ku, Tokyo)
 CRK Corporation (Takasaki, Gunma)
 Hinode Kagaku Kogyo (Maizuru, Kyoto)
 Denka Azumin Co., Ltd. (Hanamaki, Iwate)



Denka's Overseas Expansion

● Regional headquarters ● Manufacturing bases ● Sales bases ● R&D bases



Denka's Business Operations

Elastomers & Performance Plastics

- Main products**
- Chloroprene rubber
 - Styrene monomer
 - Polystyrene resin
 - ABS resin
 - Acetylene black
 - Polyvinyl alcohol



Chloroprene Rubber

A synthetic rubber used for a variety of applications, including hoses and belts for automotive components, adhesives and industrial equipment. As the world's largest chloroprene rubber producer, Denka exports approximately 80% of its domestic chloroprene rubber output, which is produced at its Omi Plant. In addition, now that it has taken over the chloroprene rubber business of U.S.-based DuPont, Denka is better positioned to expand further into overseas markets by utilizing its production bases in Japan and the United States.

Electronics & Innovative Products

- Main products**
- Electronic circuit substrates
 - Fused silica
 - Electronic packaging materials
 - Functional adhesives
 - Fine ceramics



ALSINK

A composite of aluminum and silicon carbide, ALSINK is used for the thermal conductive plates of power modules installed in high-speed rolling stock. Boasting greater reliability and lighter weight compared with the conventional thermal conductive plates made of copper, ALSINK is the top choice of railcar manufacturers around the world. Aiming to develop a more robust global supply structure for ALSINK, Denka launched a new plant to manufacture this product in Dalian, China.

Infrastructure & Inorganic Materials

- Main products**
- Fertilizers
 - Fire resistant materials
 - Special cement additives
 - Calcium carbide
 - Cement



Special Cement Additives

These materials enhance the functionalities of cement and concrete when added into them. Denka's special cement additives are widely used for construction and civil engineering applications, including bridge columns, tunnels and groundwork for buildings. In response to today's growing demand for infrastructure development in China and Southeast Asia, Denka established sales and manufacturing bases in both of these two market areas while stepping up the development of new products and the proposal of solutions to accommodate local needs.

Life Science & Environmental Products

- Main products**
- Food packaging materials
 - Housing materials
 - Industrial materials
 - Pharmaceutical products



VINI-TAPE

VINI-TAPE is the first electrically insulating adhesive vinyl chloride tape to be commercialized in Japan. It is used mainly for bundling the wiring and cords of automotive components and ensuring their electrical insulation, and is praised for its superior functionality and quality. To better accommodate burgeoning demand in Southeast Asia and the Middle East, Denka established a VINI-TAPE plant in Vietnam capable of supplying products of high quality to growing markets.

Denka's Corporate Philosophy, Principles and Strategies

Since its founding in 1915, Denka has worked to contribute to social development and win the trust of society through manufacturing operations centered on chemical engineering.

In 2015, our centennial year, we established the "Denka Principles" to determine our fundamental stance for business conduct, basic precepts that should be always referred to by employees, and the way we relate to society. We expect these principles to help us better act as one team in the pursuit of further growth over the next 100 years.

In addition to our corporate philosophy "Creating valuable things that benefit society from resources with advanced technologies," we formulated the corporate slogan "Possibility of Chemistry" to better convey our message to the general public.

Taking a forward-thinking approach, we will act in line with our goal of helping to create a better society while maintaining the trust of our stakeholders.

Structure of Denka's Corporate Philosophy, Principles and Strategies

Corporate Philosophy

Creating valuable things that benefit society from resources with advanced technologies

We engage in social dialogue to find out exactly what our stakeholders need while developing our technological strengths to meet their expectations. At the same time, we will effectively utilize limited natural resources to create valuable things.

Denka Principles

(established in 2015)

We:

1. Boldly confront challenges with determination and sincerity.
2. Think and take action today with the future in mind.
3. Deliver new values, and inspire customers through innovative *monozukuri*.
4. Respect the environment and create a cheerful workplace that prioritizes safety.
5. Contribute to a better society, whilst taking pride in being a trusted corporate citizen.

Having celebrated the centennial of our founding, we established these principles to determine a cornerstone for our business conduct and basic precepts that should be always referred to by all Group members, with the aim of ensuring robust business growth over the next 100 years.

Corporate Slogan

(established in 2015)

Possibility of Chemistry.

We will live up to expectations and trust of society through the pursuit of the possibilities chemistry offers, which will, in turn, lead to the creation of new solutions and new value. We established this slogan to summarize our corporate philosophy and to convey it to the general public more effectively.

The Denka Group Guidelines (established in 2007)

Based on our corporate philosophy, these ten guidelines represent our "corporate manifesto" aimed at fulfilling our social responsibilities.

Denka100

Toward greater corporate value for the next 100 years

Possibility of Chemistry.

Denka100 New Growth Strategies

Contributing to the Sustainable Development of Society while Enhancing Corporate Value

Looking toward the next 100 years, the Denka Group is striving to become a manufacturer that deserves people's trust. In line with new growth strategies for the Denka100 management plan, we have positioned our businesses aimed at helping to resolve social issues as growth drivers.

Reforms in Corporate Culture and Reorganization

Reforming our corporate culture and reorganizing business structures to facilitate the aggressive, speed-oriented business approach needed to become a successful global company

Securing Sustainable Growth for the Next 100 Years

Working to reduce the impact of business activities on the environment while striving to become a company that garners the lasting trust of employees and local communities

New Growth Strategies

1. Create the most optimal production system

Accelerating a shift to local production to ensure timely product supply to growing overseas markets while dedicating domestic plants to the production of specialty and high-performance products

2. Scrutinize every cost element

Reviewing every cost element through such steps as the streamlining of production processes, yield improvement and the reduction of raw material costs and maintenance expenses

3. Focus management resources on new growth drivers and develop next-generation products

- Developing solution businesses in such growth fields as the environment, energy, infrastructure and healthcare
- Reinforcing open innovation and utilizing the Denka Innovation Center

Denka is committed to providing solutions for issues confronting society through our business activities.

Examples of What Denka Can Do to Resolve Social Issues

Environment

- Addressing the global warming issue
- Promoting the effective utilization of resources and developing a recycling-oriented society

Energy

- Saving energy
- Securing a stable supply of energy and promoting the use of clean energy

Infrastructure

- Countering the aging of infrastructures
- Infrastructure development in emerging countries

Healthcare

- Preventing infectious and lifestyle-related diseases
- Securing food safety

Denka100 New Growth Strategies

We Actively Promote Initiatives under New Growth Strategies in Line with the Denka100 Management Plan.

Fiscal 2014 Overview

In 2013, we established the three new growth strategies under the Denka100 management plan, with the target year set at fiscal 2017. In line with these strategies, we have taken an aggressive business approach involving concrete initiatives.

Outline of the Denka100 Management Plan

New Growth Strategies

- 1 Create the most optimal production network
- 2 Scrutinize every cost element
- 3 Focus management resources on new growth drivers and develop next-generation products

Numerical Targets (fiscal 2017)

Consolidated operating income: ¥60 billion or more
 Operating income ratio: 10% or greater
 Overseas sales to net sales ratio: 50% or greater

Fiscal 2014 began with a celebration of the completion of the main building of the Denka Innovation Center, which has been constructed to serve as a key R&D base for promoting open innovation. Also during the year, we decided to build new plants for the manufacture of ALSINK, a highly-reliable thermal conductive plate used for power modules of high-speed rolling stock, and of Denka Thermo Film, an electronic packaging material, in Dalian, China, and Hanoi, Vietnam, respectively. As a part of our initiatives to strengthen and expand operations with regard to diagnostic reagents and vaccines, we decided to augment the network of facilities related to these businesses. In addition, we established a sales subsidiary in Dubai to penetrate markets in the Middle East and Africa. Furthermore, in December 2014, we entered into a business transfer agreement with U.S.-based DuPont, a world-leading comprehensive chemical company, committing ourselves to the major task of taking over its chloroprene rubber business.

In April 2015, we completed an ultra-pure acetylene black production facility at our Chiba Plant that will provide material for lithium ion secondary batteries. In the same month, we acquired the majority stake in Posco Venture Sdn. Bhd. (now changed to Denka Infrastructure Malaysia Sdn. Bhd.), a Malaysia-based construction material manufacturer. In August 2015, we signed a stock transfer agreement to acquire Icon Genetics GmbH, a Germany-based biopharmaceutical R&D company, with the aim of stepping up pharmaceutical development utilizing cutting-edge cell culture technologies.

In line with our growth strategy, we are also striving to scrutinize every cost element, with the goal of achieving a total of ¥10 billion in cost reductions by the end of fiscal 2017. To this end, we are conducting thorough reviews encompassing production processes, yield, raw materials, utilities, facility maintenance and upgrades as well as logistics operations, with an eye to international competitiveness.

Specific measures taken to achieve our cost reduction goals included reducing unit fuel consumption and improving yield, with each plant achieving solid improvements in these two areas. We also reviewed raw materials and packaging materials, adopting more cost-effective alternatives where possible while enhancing logistics operations through centralized logistics information management and improved collaboration with transporters. Among initiatives in the field of engineering were increasing the frequency of facility inspections and undertaking upgrades with a focus on reducing negative loss attributable to facility failure. Efforts are now under way to provide preventive maintenance education to employees and to ensure the early detection of possible defects. For energy saving, we optimized utility usage at the Chiba Plant in line with the reorganization of the styrene-based product manufacturing structure. Moreover, we upgraded the Kotakigawa Power Plant's turbine runners while expanding the power generation capacity of the Oami Power Plant by increasing its water intake.

On June 19, 2015, we increased the number of outside directors from two to three while decreasing the total number of directors by two, with the aim of further enhancing management transparency and soundness. Along with this change in the composition of our Board of Directors, we appointed a Chief Compliance Officer in charge of supervising legal compliance of Groupwide organizations on July 13, 2015, thereby reinforcing our management structure to achieve goals set forth in the Denka100 management plan.

Changing Our Company Name and Updating Our Corporate Identity

In April of this milestone year, we renewed our corporate logo and introduced a new corporate slogan and, on October 1, we changed our company name to Denka Co., Ltd., having gained approval to do so from the 156th ordinary General Meeting of Shareholders held on June 19, 2015. Furthermore, with an eye to the recent globalization of our Group operations we formulated the Denka Principles, which set out our fundamental stance for business conduct and serve as basic precepts for the way we relate to society. These principles clarify our commitment to prioritizing safety, giving due consideration to the environment, creating new value through manufacturing and remaining a company worthy of the trust of society. We also expect these principles to provide a set of values that serve as a cornerstone for our corporate activities and that are shared by employees throughout the Group.

While pursuing sustainable growth and striving to fulfill its social responsibilities, Denka will remain true to its founding spirit. Simultaneously, building on our heritage, we will create an even stronger company by rallying the strength of all Group employees to achieve goals set forth in the Denka100 management plan. In these ways, we will make the first step toward the next 100 years of our operations.



President Shinsuke Yoshitaka delivering a greeting at a welcoming ceremony held on April 1, 2015 for new recruits

Fiscal 2014 Main Initiatives under the Denka100 New Growth Strategy

Growth strategy	Field	Time	Product or business	Details
Create the most optimal production network	Group operations	April 2014	Overall	Established Denka Taiwan Corporation
	Elastomers & Performance Plastics	May 2014	ABS and specialty resins	Implemented an overhaul of the Chiba Plant's manufacturing lines to secure greater competitiveness (successively rebuilding plant facilities until May 2015)
	Elastomers & Performance Plastics	June 2014	Vinyl acetate monomer	Withdrew from the vinyl acetate monomer business
	Group operations	January 2015	Overall	Established Denka Middle East and Africa FZE in Dubai, the United Arab Emirates
	Life Science & Environmental Products	March 2015	Food packaging sheets	Launched a new production facility at Denka Advanced Materials (Suzhou) Co., Ltd.
	Life Science & Environmental Products	May 2015	VINI-TAPE	Launched Denka Advanced Materials Vietnam Co., Ltd., a new production base in Greater Hanoi City, Vietnam Photo 1
	Electronics & Innovative Products	May 2015	Electronic packaging sheets	Completed a new electronic packaging sheet plant at Denka Advanced Materials Vietnam Co., Ltd. (mass-production kickoff scheduled for 2016 spring)
	Electronics & Innovative Products	August 2015	ALSINK	Established Denka Electronic Materials Dalian Co., Ltd., a new production base for ALSINK thermal conductive plate for power modules of high-speed rolling stock in Dalian, China (mass-production kickoff scheduled for the end of fiscal 2015)
Focus management resources on new growth drivers and develop next-generation products	Elastomers & Performance Plastics	Fiscal 2015	Chloroprene rubber	Plan to acquire the chloroprene rubber business of DuPont in tandem with MITSUI & CO., LTD. and established Denka Performance Elastomer LLC
	Infrastructure	March 2014	Special cement additives	Initiated production at Denka Inorganic Materials Tianjin Co., Ltd., a new manufacturing base in China Photo 2
	Infrastructure	April 2014	Special cement additives	Launched Denka Infrastructure Technologies Shanghai Co., Ltd., and Denka Infrastructure Technologies Pte. Ltd., which serves as regional headquarters in China and Singapore
	Group operations	April 2014	Overall	Completed the Denka Innovation Center main building while establishing the Advanced Technologies Research Institute, the Life Innovation Research Institute and the Infrastructure & Solutions Development Research Institute
	Healthcare	April 2014	Rapid diagnostic test kits for infectious diseases	Released QuickNavi™. StrepA, a rapid antigen detection test kit for beta hemolytic streptococcus Group A
	Healthcare	July 2014	Pharmaceutical products	Decided to construct a new manufacturing facility for diagnostic reagents at the Kagamida Plant of Denka Seiken Co., Ltd. (completion scheduled for March 2016)
	Healthcare	March 2015	Rapid diagnostic test kits for infectious diseases	Succeeded in developing a prototype Ebola virus antigen rapid diagnostic reagent through joint research with Dr. Ayato Takada, a professor at Hokkaido University's Division of Global Epidemiology, Research Center for Zoonosis Control
	Energy	April 2015	DENKA BLACK Li	Established an ultra-pure acetylene black production facility at the Chiba Plant
	Infrastructure	April 2015	Special cement additives	Made POSCO Venture Sdn. Bhd. a subsidiary, renaming it Denka Infrastructure Malaysia Sdn Bhd. Photo 3
	Healthcare	May 2015	Oncolytic virotherapy	Initiated the development of large-scale production methods for the "G47Δ" oncolytic virus as a project commissioned by Dr. Tomoki Todo, a professor at the Institute of Medical Science of the University of Tokyo
	Healthcare	June 2015	Rapid diagnostic test kits for infectious diseases	Signed an agency contract with Sinopharm Group Beijing Huahong Co., Ltd. in China for marketing the QuickNavi™-Flu influenza antigen detection test kit
	Infrastructure	June 2015	Ultrahigh-strength fiber-reinforced concrete	Received the Japan Prestressed Concrete Institute 2014 Award for Outstanding Engineering Innovations for the development of SUQCEM ultrahigh-strength fiber-reinforced concrete
Healthcare	August 2015	Bio-pharmaceuticals	Acquired Icon Genetics GmbH, a Germany-based bio-pharmaceutical R&D venture, taking over its novel plant-based genetic modification technologies for antigen and antibody cell culture	
Initiatives for the next 100 years		April 2014	Solar power generation	Began leasing land in Tomakomai City, Hokkaido Prefecture, to Mitsui Fudosan Co., Ltd. as a site for mega-solar power generation business
		October 2014	Hydroelectric power generation	Initiated the construction of the New Omigawa Power Plant (operational kickoff scheduled for 2018)
		December 2014	Hydroelectric power generation	Kurobegawa Electric Power Company, a joint venture of Hokuriku Electric Power Company and Denka, began preparatory survey for the construction of the New Himekawa Power Plant No. 6 (operational kickoff scheduled for 2022)
		April 2015	Corporate identity	Renewed corporate logo while formulating new corporate slogan "Possibility of Chemistry"
		May 2015	Limestone mining	Completed construction to develop a new working face in the eastern section of the Omi limestone mine of the Omi Plant
		October 2015	Corporate identity	Changed company name from DENKI KAGAKU KOGYO KABUSHIKI KAISHA to Denka Co., Ltd.



Photo 1 Completion ceremony of Denka Advanced Materials Vietnam



Photo 2 Production kickoff at Denka Inorganic Materials Tianjin



Photo 3 Denka Infrastructure Malaysia's laboratory in State of Johor

Elastomers & Performance Plastics

Developing New Markets for Our Unique Products while Satisfying Customer Needs around the World

Specializing in the manufacture of elastomers, special conductive materials and plastics, the Elastomers & Performance Plastics Division produces chloroprene rubber that commands a top global market share in addition to acetylene black, SBC resin and MS resin, and overseas sales represent more than 60% of its net sales. While accommodating ever-growing demand for these products in markets around the world, the division is striving to improve its operating structure and efficiency and thereby reinforce the Company's business foundation. Moreover, the division has developed products with superior functionalities tailored to customer needs, including an ultra-pure acetylene black for next-generation LiBs. Going forward, its manufacturing, R&D and sales sections will work as one to maximize overall organizational strengths, thereby creating innovative products capable of helping to resolve issues confronting society.



Toshio Imai
Executive Officer,
Elastomers & Performance Plastics



Elastomers & Performance Plastics

Business Overview

This division handles products in three key categories: acetylene derivatives, including chloroprene rubber and acetylene black; styrene-based functional resins; and acetyl chemicals. Revenues from these products represent 40% of Denka Group sales. Leveraging a broad range of techniques and experience in synthesizing, compounding and molding polymers, we are bolstering technological innovation in such manufacturing fields as automobiles, home appliances and food packaging.

Business Models (Value Creation Flows)

Business	Product	Source of value	Value created
Elastomers	DENKA Chloroprene DENKA ER	<ul style="list-style-type: none"> Polymer structure design technologies tailored to specific applications Polymer composite technologies to achieve targeted functionalities 	<ul style="list-style-type: none"> Provide products with superior performance, including high-heat resistance and high durability and longer product lives
Special Conductive Materials	DENKA BLACK	<ul style="list-style-type: none"> Technologies to precisely control the diameter and maintain the high purity and crystalline properties of particles Technologies to produce uniformly granulated particles that boast high bulk density and can be easily dispersed into such materials as resins Activation technologies that form pores on particle surfaces, significantly increasing specific surface area 	<ul style="list-style-type: none"> Provide conductive materials for LiBs to increase their reliability, capacity and output Provide a conductive material for use in high-voltage power transmission cables to help extend its useful life and reduce transmission loss
Performance Plastics	DENKA ABS Transparent resins Heat resistant resins CLEAREN	<ul style="list-style-type: none"> Technologies to control polymer structures combining various polymerization methods Sophisticated manufacturing and quality management technologies capable of curbing the formation of and removing insoluble polymer 	<ul style="list-style-type: none"> Supply products with superior transparency, heat resistance and hinge performance Realize superior amenability to molding, printability and shrink property
Acetyl Chemicals	DENKA POVAL	<ul style="list-style-type: none"> Polymer structure control technologies tailored to specific applications Powder control technologies to produce resin particles 	<ul style="list-style-type: none"> Provide a dispersant for the polymerization of vinyl chloride and a vinyl acetate emulsifier with stable dispersibility Provide raw materials for glass interlayer films with thermal stability and excellent transparency

The Market Environment

- A shift to overseas production in electronics, automotive and other related industries on the back of demand growth in emerging economies
- Increasing market presence of commodity manufacturers based in emerging economies
- Burgeoning demand for performance plastics and the shortening of product life cycles

Strategies

- Create the most optimal production system**
 - Develop a more robust global supply structure for our flagship products to solidify their top global market shares
- Improve business structure**
 - Minimize exposure to risks attributable to changes in the trade environment by scrutinizing every cost element and optimizing all processes from production to sales
- Develop new businesses**
 - Focus further management resources on growth drivers and promote external collaboration to develop new businesses for the next generation

Main Achievements in Fiscal 2014

- Created the most optimal production system**
 - Acquired the chloroprene rubber business from DuPont
 - Completed a new ultra-pure acetylene black production facility (Chiba Plant)
- Improved business structure**
 - Downsized the ABS business
- Developed the new business**
 - Reinforced development functions of each department

Challenges

- Step up initiatives to create new businesses
- Optimize business portfolio to focus more management resources on growth drivers
- Further reinforce overseas business network

Topic

Acquiring the Chloroprene Rubber Business from DuPont

We acquired DuPont's chloroprene rubber business jointly with Mitsui & Co., Ltd. undertaken in line with the Denka100 new growth strategy, the acquisition was intended to help optimize the Group's production and marketing structure. With two production bases, namely, the Omi Plant, which employs the acetylene method, and the new North American site, which employs the butadiene method and is favorably located, Denka is now better positioned to supply high-quality products around the world.

Creating Shared Value (CSV); Helping to Resolve Social Issues

DENKA IP Styrene Copolymer Resin

Social Issues

- A need to reduce substances hazardous to human health within dwelling and working environments
- Growing calls for CO₂ reduction

Society's Technological Expectations

- Reducing the content of the volatile organic compound (VOC)
- Significantly improving resin's heat resistance with a small amount of additives

The Denka Group's Technological Solutions

A copolymer consisting of styrene, N-phenylmaleimide and maleic anhydride, DENKA IP is a special styrene-based resin made using proprietary Denka polymerization technologies. Its unique molecular structure enables it to serve as a superior heat-resistance improver. When mixed with ABS resin, DENKA IP makes it easier to produce heat-resistant resin through compounding extrusion. Moreover, as it boasts superior thermal stability and generates only small amount of gas during the molding process, manufacturers can reduce total VOC (TVOC) content in thermal resins by 60%

compared with those made using conventional heat-resistance improvers. This product is also used as a compatibilizer for polymer alloys (ABS, PA, etc.) due to its highly responsive maleic anhydride group.



IP pellets

Infrastructure & Inorganic Materials

Pursuing a Needs-Oriented Approach and Developing a Local Network to Provide Optimal Solutions

The Infrastructure & Inorganic Materials Division handles cement and special cement additives, both of which are essential for infrastructure development, and chemical fertilizers that help improve crop yields in addition to providing fire resistant materials, desulfurizing agents and other inorganic materials for use at such facilities as steelworks. Moreover, an array of special cement additives support the division's capability to offer optimal solutions, including novel materials and innovative construction methods. Working together, the division's manufacturing, sales and R&D sections serve markets in China and Southeast Asia, where rapid infrastructure development is under way, and they are bringing their accumulated technological know-how to bear in agricultural and inorganic materials related fields. Paying close attention to the latest customer needs, we will advance our solution business to promote energy and resource saving and to curb global warming.



Hideyuki Udagawa
Director, Managing Executive Officer,
Infrastructure & Inorganic Materials

1 The Market Environment

- Demand growth reflecting an increase in construction and infrastructure maintenance projects associated with the recovery from the Great East Japan Earthquake and an upturn in public-sector investment
- Burgeoning demand for infrastructure development in China and Southeast Asia
- A shrinking farmer population driving a shift toward automated and large-scale farming
- Growing need for ecological solutions

2 Strategies

- Release high-value-added products capable of helping save energy and reducing environmental burdens
- Step up overseas expansion with a focus on augmenting local production in Asia
- Maximize profitability by optimizing our production system
- Expand the scope of our solution business to encompass not only construction but agriculture and other areas
- Facilitate the prudent use of resources and thereby help develop a recycling-oriented society

3 Main Achievements in Fiscal 2014

- **The special cement additive business:** Increased our equity holdings in POSCO Venture Sdn. Bhd. (hereafter "POSCO"; now Denka Infrastructure Malaysia; see also the following articles for details) to step up our Southeast Asian operations through business collaboration
- **The agri-products business:** Developed a humic acid liquid fertilizer tailored for use in plant cultivation facilities that employ nutriculture systems to accommodate recent growth in demand
- **The cement business:** Undertook steady resource recycling operations equivalent to the fiscal 2013 level

4 Challenges

- **The special cement additive business:** Achieve annual overseas sales of ¥15 billion
- **The agri-products business:** In addition to developing humic acid liquid fertilizers, a weed-preventing soil solidifier and cutting-edge farming methods, pursue new business to support agricultural infrastructure, such as the marketing of appliances for horticulture facilities
- **The cement business:** Step up resource recycling operations (develop new recycling technologies)

Topic

Expanding into Markets Overseas by Building Robust Local Business Network

Toward the goal of achieving annual overseas sales of special cement additives amounting to ¥15 billion, we are striving to develop a more robust local business network. Our current lineup of overseas bases is as follows:

- 1 Europe: Denka Chemicals G.m.b.H (DCG; Düsseldorf, Germany)
- 2 China: Denka Infrastructure Technologies Shanghai Co., Ltd. (DITS; Shanghai)
- 3 Southeast Asia: Denka Infrastructure Technologies Pte. Ltd. (DIPL; Singapore)

In Southeast Asia, in April 2015 we acquired a majority stake in POSCO,* a leading construction material manufacturer in Malaysia, making it subsidiary and thereby strengthening our local special cement additive production structure. We intend to leverage POSCO's marketing network throughout the region.

* Changed company name to Denka Infrastructure Malaysia Sdn. Bhd.

Business Overview

In addition to the calcium carbide and calcium cyanamide fertilizers that Denka has been manufacturing for a century, this division handles cement, special cement additives and other products made by applying inorganic chemistry. Leveraging in-house power generation facilities and limestone mines owned within plant premises, we provide unique products and solutions that support agricultural development and social infrastructure.



Business Models (Value Creation Flows)

Business	Product	Source of value	Value created
Special Cement Additives	Special cement additives	<ul style="list-style-type: none"> • Unique solution technologies capable of controlling various aspects of concrete's characteristics, such as hardening, expansion or shrinkage • Robust R&D structure backed by diverse collaboration involving partnerships between industry, academia and the government 	<ul style="list-style-type: none"> • Assist infrastructure development in emerging nations (roads, railways and concrete buildings) • Provide technologies to repair aged concrete structures and to facilitate reconstruction following disasters
Agri-Products	Fertilizers	<ul style="list-style-type: none"> • Fertilizer technologies accumulated over 100 years of experience in providing solutions tailored to varying climates and soil qualities in regions throughout Japan 	<ul style="list-style-type: none"> • Provide fertilizers and farming technologies best suited to specific regions and types of crop • Supply safe and ecological products that minimize soil and atmospheric pollution • Contributed to the restoration of farmland damaged by such natural disasters as high winds and flooding while mitigating the impact of climate changes
Inorganic Materials	SULFEX FIRELEN	<ul style="list-style-type: none"> • An array of inorganic material manufacturing technologies that enable the production of high-quality fire resistant materials and desulfurizing agents with superior functionalities 	<ul style="list-style-type: none"> • Contribute to the reduction of environmental burdens as well as improvements in product quality and cost competitiveness by supplying inorganic materials to Japan's steelworks, already the world leader in terms of quality and production efficiency

Creating Shared Value (CSV); Helping to Resolve Social Issues

Denka Cement and Recycling Business in Cement Production

Social Issues

- Need to reduce CO₂ emissions and energy consumption
- Growing calls for the effective utilization of limited natural resources
- Waste recycling

Society's Technological Expectations

- Realizing manufacturing technologies that use less energy
- Utilizing recycled raw materials and fuels

The Denka Group's Technological Solutions

Denka's cement products are made using limestone from mines located near the Omi Plant in addition to fly ash, waste soil from construction sites, waterworks sludge and other waste, such as byproducts from in-house facilities, as raw materials. Moreover, we utilize sewage sludge, used tires and waste plastics as fuel for cement production. At the same time, we are striving to reduce the impact of our operations on the environment by fully harnessing energy-saving technologies and by using clean energy from our hydroelectric power plants, biomass boilers, and waste heat recovery power systems that utilize heat from cement production.



Cement production facility

Electronics & Innovative Products

Developing New Businesses with an Emphasis on Adding and Creating New Value

The Electronics & Innovative Products Division boasts an array of products that are essential to the field of electronics. Its offerings include electronic parts materials, packaging materials for transporting electronic components, solutions for improving production process, thermal solutions, and structural adhesives. In line with the Denka100 management plan, the division has implemented the "VALUE 50" business strategy, achieving stable business growth. In the face of today's diversifying customer needs, it is important to move swiftly to adapt to drastically changing market conditions. We will pursue forward-looking product development to maximize the "Possibility of Chemistry" while fully leveraging our creativity in order to provide markets with cutting-edge products and technologies.



Sanshiro Matsushita
Managing Executive Officer,
Electronics & Innovative Products

1 The Market Environment

- Quantitative shrinkage in market demand for electronic materials due to the miniaturization of devices
- Growing requirements for cost-competitive products due to rapid commoditization
- Burgeoning demand for infrastructure development in emerging countries

2 Strategies

- 1. Build an optimal production system and improve productivity**
 - Leverage our domestic and overseas production networks more efficiently (fused silica, spherical fused silica and electronic packaging materials)
 - Develop overseas production sites (HITPLATE, ALSINK, adhesives and electronic packaging materials)
- 2. Shift our focus toward future core business**
 - Step up operations related to functional fine particles (phosphor, spherical alumina and ceramics-based materials)
 - Develop solutions in the adhesive business
- 3. Develop new businesses**
 - Push forward the commercialization of new products through collaboration with partner companies and other external organizations (the NIMS-DENKA Center of Excellence for Next Generation Materials, etc.)

3 Main Achievements in Fiscal 2014

- Established a new ALSINK production base in Dalian, China
- Established a new production base for Denka Thermo Film electronic packaging material in Greater Hanoi City, Vietnam
- Denka's phosphor was chosen for 4K televisions
- Expanded applications for spherical alumina and ceramics-based materials while penetrating overseas markets

4 Challenges

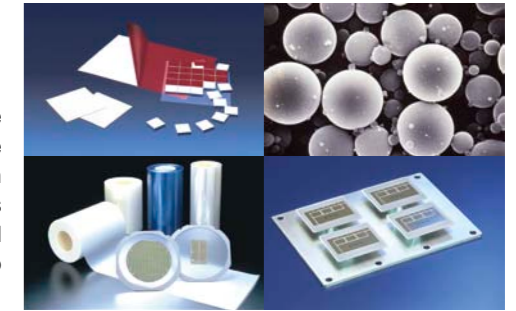
- Initiate production at two new plants (Dalian and Hanoi) as planned
- Promote the local production of adhesives to better serve local markets (e.g., China)
- Develop new products based on our functional fine particle technologies and realize early commercialization

Topic

- 1. Establishing Denka Electronic Materials Dalian Co., Ltd.**
ALSINK is widely used to make heat dissipation plates for the power modules used in rolling stock, automobiles and industrial instruments. It is expected that demand for power modules for rolling stock will grow in markets worldwide, especially in China. We therefore established a local subsidiary in Dalian, China, to manufacture and market ALSINK, with mass-production kickoff scheduled for the end of fiscal 2015.
- 2. Setting up a new production facility at Denka Advanced Materials Vietnam**
Denka Thermo Film is widely used as a cover tape in the process of transporting electronic components. We established a new manufacturing facility for this product within the premises of our existing plant in Greater Hanoi City, Vietnam. With the mass-production kickoff scheduled for spring 2016, we will take advantage of business opportunities resulting from burgeoning demand while maintaining the cost competitiveness of our products.

Business Overview

Supporting progress in electronics and technologies, the Electronics & Innovative Products Division provides functional fine particles and thermally conductive substrates, which achieve key thermal control for realizing miniaturization and greater reliability and performance. At the same time, our functional films and adhesives play essential roles in realizing labor-saving, cost-efficient and environment-friendly manufacturing processes. Providing a variety of products to meet customer needs, we will strive to help resolve social issues.



Business Models (Value Creation Flows)

Business	Product	Source of value	Value created
Functional Fine Particles	Fused silica Spherical fused silica Spherical alumina	Technologies that employ the flame spray pyrolysis method to shape spherical oxide ceramic particles and technologies to precisely control particle diameters	Enable extremely close packing into semiconductor seals, realized greater stability in sizes thanks to a reduced thermal expansion property and improved safety due to a cut in fire retardant content → Contribute to the miniaturization of semiconductors and electronic devices as well as the reliability of these products
	Boron nitride Silicon nitride Aluminum nitride Phosphor	High-temperature calcining technologies in a nitrogen atmosphere	Create ceramics with unique characteristics, including superior heat conductivity, strength, lubricity and color-rendering → Contribute to the realization of smaller, thinner and more energy-saving electronic devices as well as improved high-resolution displays
Heat Dissipating Products	Highly heat-conducting substrates (DENKA AN PLATE and HITPLATE) Thermally conductive sheets and thermal grease-type dissipation materials	Technologies for calcining highly heat-conducting fillers and those for designing electrical insulation and thermal dissipation materials	Create a variety of heat-dissipation and other solution technologies → Contribute to the miniaturization of rolling stock and automotive components, industrial instruments and home appliances as well as mobile devices while improving their energy efficiency
Functional Films	Electronic packaging materials (Denka Thermo Film and Denka Thermo Film)	Technologies to produce resin compounds with such functionalities as electrical conductivity in addition to multilayered film technologies	Provide carrier tapes, cover tapes and other packaging materials with superior functionalities for transporting electronic components and thereby help accelerate production process and miniaturization → Contribute to the creation of better-performing, more cost-competitive electronic components
Adhesives	HARDLOC ELEGRIIP	Adhesive compounding technologies and a wealth of data with regard to various adhesive and adherent materials	Realize products with greater reliability in adhering to various materials, thereby contributing to labor-saving semiconductor production processes → Help enhance product design and quality while reducing production processes and costs

Creating Shared Value (CSV); Helping to Resolve Social Issues

Social Issues

- Need to reduce the energy consumption of rolling stock and automobiles in driving
- Demand for Insulated Gate Bipolar Transistor (IGBT) drive control modules with greater durability and longer useful lives

Society's Technological Expectations

- Improving the heat-cycle performance of IGBT modules

ALSINK Highly-Reliable Thermal Conductive Plates for the Power Modules Used in High-Speed Rolling Stock

The Denka Group's Technological Solutions

A composite of aluminum and silicon carbide, ALSINK boasts extremely high heat conductivity and is used in the electronic circuit substrates of the IGBT drive control modules installed in rolling stock, demand for which is surging on the back of growing calls for energy-saving railcars. Since ALSINK's thermal expansion ratio can be precisely adjusted to match that of ceramics-based electronic circuit substrates, the product enables a

significant improvement in such modules' heat-cycle performance compared with conventional thermal conductive plates.



ALSINK

Life Science & Environmental Products

Helping Enhance the Quality of People's Lives while Tailoring Solutions in Step with Changing Lifestyles

The Life Science & Environmental Products Division is in charge of products closely related to people's lifestyles and living environments and serves such industries as healthcare, foodstuffs and housing. In recent years, maturing markets and a concomitant rise in demand for higher product quality have driven worldwide recognition of the technological strengths of Japanese manufacturers. Accordingly, we will strive to improve quality and productivity even further while developing our overseas business network. It is expected that changes in people's lifestyle needs will fuel the constant creation of new demand. Staying vigilant to market trends, we will continue to work to enhance the quality of people's lives through the provision of environment-friendly and safe products.



Junichi Kimura
Executive Officer,
Life Science & Environmental Products

1 The Market Environment

- The maturation of the domestic market, intensifying competition and rapidly aging society
- Burgeoning purchasing power of emerging economies and growing interest in food safety
- Proliferation of multilateral trade agreements
- Diversification of people's lifestyles and values and growing interest in environmental protection

2 Strategies

- Enhance cost competitiveness through such steps as the creation of an optimal production system
- Promote a shift to local production for products targeting overseas markets (TOYOKALON, VINI-TAPE and food packaging materials)
- Explore promising domestic and overseas markets while nurturing next-generation products and technologies

3 Main Achievements in Fiscal 2014

- **Reinforced our overseas production network**
TOYOKALON (Singapore; initiated production in June 2013), Food packaging materials (China; March 2015) and VINI-TAPE (Vietnam; May 2015)
- **Positioned us to further penetrate Middle Eastern and African markets**
Established a local sales subsidiary in Dubai (January 2015)
- **Developed and released new products**
Released a highly oil resistant sheet for use in food containers, TEFKA weather- and heat-resistant fluorine-based film and a novel synthetic fiber for use in hairpieces while developing marketing channels for influenza rapid diagnostic test kits in China as well as a prototype rapid diagnostic reagent for Ebola virus

4 Challenges

- Establish a more flexible production system capable of accommodating diversifying needs (synthetic fiber and food packaging materials)
- Build a supply structure to accommodate demand in emerging economies (synthetic fiber, VINI-TAPE and food packaging materials)
- Reduce waste through the development of lightweight materials (food packaging materials, VINI-TAPE and fluorine-based films)

Topic

Launching a VINI-TAPE Production Facility (Denka Advanced Materials Vietnam)

We established a new production facility for VINI-TAPE, an electrical insulating tape, in Greater Hanoi City, Hung Yen Province, Vietnam, initiating production in May 2015. VINI-TAPE is used for binding cables for electrical appliances as well as wire harnesses installed in automobiles. It is expected that demand for this product will grow due to the growth of emerging economies and the popularization of hybrid and electric vehicles.



VINI-TAPE shipment ceremony

Business Overview

The division is engaged in wide-ranging businesses that directly affect people's lifestyles and living environments. For example, it handles materials for construction and civil engineering use, such as rain gutters and corrugated pipes, as well as industrial tapes, food packaging materials and pharmaceuticals. Overseas, the division is producing TOYOKALON, a synthetic fiber for wigs and hairpieces that is expected to become popular globally, VINI-TAPE for wire harness in automobile, and highly-functional food packaging sheets. In addition, Denka Seiken Co., Ltd., a Group company serving as a key business driver in the healthcare field, boasts the QuickNavi™ series rapid diagnostic test kits. Commanding a considerable share of the domestic market for diagnostic reagents for influenza, norovirus and other infectious diseases, these test kits can provide diagnoses without using any special equipment or electric devices. Going forward, we will expand into Asian and African markets while developing a rapid diagnostic test kit for Ebola virus.



Business Models (Value Creation Flows)

Business	Product	Source of value	Value created
Housing Materials	Rain gutters for housing	<ul style="list-style-type: none"> • Polymer design and resin compounding and processing technologies • A robust sales and service network encompassing regions across Japan backed by two manufacturing and supply bases in the Kanto and Kyushu regions 	<p>Functionalities</p> <ul style="list-style-type: none"> • Superior water discharge capacity (to handle heavy rainfalls) • Lightweight and easy to install (labor saving, minimal burden on structure and cost reduction) • High durability (reducing the frequency of replacement) <p>Designs</p> <ul style="list-style-type: none"> • A range of color variations and shape (sophisticated designs and improved appearance) <p>Service capabilities</p> <ul style="list-style-type: none"> • A robust service system capable of satisfying customer needs
Adhesive Tapes	VINI-TAPE (electrically insulating adhesive tape)	<ul style="list-style-type: none"> • The first PVC electrical insulating tape to be industrialized in Japan • Technological capabilities that enabled the creation of hand-cutttable, highly elastic tape boasting highly functionality and quality and a backing boasting stable release property • A robust global sales and service network encompassing more than 60 countries around the world supported by two production bases in Japan and Vietnam 	<ul style="list-style-type: none"> • Provide a highly reliable tape that makes it easy to bind wires (for wire harnesses in automobile and electrical appliances) • Provide a range of color and design variations (for households)
Food Packaging Materials	Heat-resistant biaxially-oriented polystyrene sheet (BOPS)	<ul style="list-style-type: none"> • An integrated production structure encompassing polymer synthesis and sheet processing as well as container molding, all backed by a comprehensive R&D structure 	<p>Functionalities</p> <ul style="list-style-type: none"> • Superior heat resistance that minimizes package deformation when contents are microwaved (growing need for quick and easy cooking) • Highly transparent food containers that allow consumers to view content without breaking the seal (diversification of food ingredients) • An even thinner and lighter container material boasting superior resilience (easy to handle during transportation and storage, helping reduce waste) <p>Spillover Effects</p> <ul style="list-style-type: none"> • Popularization of hygienic food packaging materials (growing concern for food safety in emerging economies)

Creating Shared Value (CSV); Helping to Resolve Social Issues

TOYOKALON Synthetic Fiber for Wigs and Hairpieces

Social Issues

- Demand for products that help improve the quality of life in African countries and other emerging markets driven by burgeoning economic and population growth

The Denka Group's Technological Solutions

In 1952, we became the first in the world to commercialize polyvinyl chloride synthetic fiber. Employing polymer processing technologies that led to this accomplishment, we are producing TOYOKALON, a synthetic fiber boasting superior functionality and a variety of design options, with our Ofuna Plant (Kamakura, Kanagawa) and newly built Tuas South Plant (Singapore) serving as its production bases.

The Denka Group's Strategies to Resolve Social Issues

To stay apprised of diversifying local needs, we engage in marketing through our base in New York as well as a Middle Eastern subsidiary that we have just established in Dubai to secure a gateway to African markets. Moreover, our technical services include the proposal of various styles, helping us promote new product variations.

Society's Technological Expectations

- Development and supply of synthetic fiber products that accommodate a variety of fashion needs

Customer Response Wigs and hairpieces made of TOYOKALON boast a soft lifelike feel and are tangle resistant even after long wearing periods. Moreover, the fiber boasts a unique glossiness that none of our competitors can match. Because of this, TOYOKALON has long enjoyed a loyal following in Africa and the United States.

An example of products made of TOYOKALON



Promoting Our R&D Activities

Under the Slogan “Open Innovation and Challenge,” We Will Step up R&D Aimed at the Creation of New Products, Businesses and Value.

Integrating the Group’s Technological Strengths to Pursue Next-Generation Product Development Centered on Four Growth Fields

Working toward the goals of the Denka100 management plan, we are promoting innovation by focusing the Denka Group’s R&D resources on the four growth fields of the environment, energy, infrastructure and healthcare. In concert with the completion of the Denka Innovation Center main building in April 2014, we established three research institutes to operate within it. At these cutting-edge R&D facilities, we are striving to create and nurture new businesses for the next generation.

The Advanced Technologies Research Institute is in charge of developing environmental and energy solutions, such as secondary batteries and next-generation energy technologies. The Life Innovation Research Institute, an epoch-making organization that focuses on the development of new medicines, next-generation diagnostic reagents and test kits as well as vaccines, was established through the integration of Denka Seiken’s reagent and vaccine development section and Denka’s life science development section, with the aim of facilitating innovation. The Infrastructure & Solutions Development Research Institute drives Denka’s solution business through the worldwide provision of materials for infrastructure development while creating innovative, labor-saving construction methods.



Norihiro Shimizu

Managing Executive Officer, Research and Development, Innovation Center, New Business Planning Dept., R&D Promoting Dept., Intellectual Property Dept.

Our R&D Policy and Structure

In line with the Denka100 management plan’s growth strategy, we are striving to focus our management resources on new growth drivers and to develop next-generation products through R&D. Targeting the environment, energy, infrastructure and healthcare as these growth drivers, we aim to develop products that are closely tailored to market needs. This approach requires going beyond supplying generic materials; rather, we are developing a broad lineup of finished products and solutions. Accordingly, we are pursuing collaborative

research with strategic partners and other external organizations while also engaging in in-house R&D. These initiatives aimed at facilitating open innovation are expected to help us create new value into the future.

In particular, the Denka Innovation Center serves as our core R&D base by providing a platform for strategic cooperation between industry, academia and the government as well as for the introduction of external input, thereby speeding the development of new businesses and products.



Completion ceremony at the Denka Innovation Center main building



President Shinsuke Yoshitaka delivering a greeting at the center’s opening celebration

Fiscal 2014 R&D Achievements

The NIMS-DENKA Center of Excellence for Next Generation Materials

In tandem with National Institute for Materials Science (NIMS), in June 2013 we established the NIMS-DENKA Center of Excellence for Next Generation Materials as one of our initiatives aimed at facilitating inter-organizational joint research with external institutes and universities. Bringing together the variety of technologies and ideas that NIMS and Denka have accumulated, this facility will help us undertake effective and efficient R&D aimed at creating innovative products and solution models and thereby enable us to meet diversifying needs outside our conventional business domains.

Since the successful collaboration of the two entities in creating an innovative LED phosphor, this center has been providing an R&D platform for a variety of ongoing projects, including the creation of novel inorganic materials with superior thermal properties for use in electronic circuit substrates and power devices as well as organic polymers and biomaterials. This collaborative approach, which goes beyond the scope of conventional joint research conducted on an individual project basis, is drawing attention as a best practice model for comprehensive R&D partnerships.



A lecture at NIMS



Panel exhibition at the 2nd “Denka Day at NIMS”

Comprehensive Research Partnership with Yamagata University

In October 2013, we signed an agreement with the Graduate School of Science and Engineering at Yamagata University that will ensure a closer collaborative research partnership. Backed by the university’s excellent basic research accomplishments in the synthesis, physical

property evaluation, molding and processing of polymers, this collaboration has led to the development of next-generation synthetic resins, elastomers and polymer processing products. Some ongoing joint R&D projects have already yielded samples for potential customers. Looking ahead, we will accelerate the creation of new materials in a bid to accommodate diverse market needs.

Other Joint R&D Initiatives

We are stepping up collaboration with overseas research organizations and universities to apply a global perspective to developing new products and businesses. We are engaged in ongoing joint research with Shanghai Jiao Tong University in China in the field of elastomers while promoting an R&D project centered on performance plastics with Singapore’s Institute of Materials Research and Engineering, a research organization supervised by that country’s Agency for Science, Technology and Research. We also actively seek collaboration with other private companies as potential strategic partners.



A presentation meeting to discuss the progress of collaborative research

Initiatives for Fiscal 2015 and Beyond

We will work to promote both internal and external collaboration, enhancing our core technologies while integrating information and technological input from outside institutions. We will utilize the Denka Innovation Center as a core R&D base, thereby accelerating the development of next-generation products in the four fields that we have positioned as growth drivers.

In particular, we consider open innovation to be essential to the execution of our growth strategies. We will therefore ask even more research organizations and universities to engage in comprehensive inter-organizational joint research along with NIMS and Yamagata University. We will also promote business-to-business collaboration with our strategic partners. Overseas, we will initiate collaborative research with Indian Institute of Technology to study elastomers. Plans also call for launching new joint R&D projects in such promising fields as secondary batteries and life science.

Contributing to Social Development by Helping to Resolve Issues Confronting Society through Chemistry and Manufacturing

In line with its commitment to CSR, Denka has focused on responsible care (RC) activities, an initiative promoted across the entire chemical industry, while prioritizing safety in all aspects of its business activities. Simultaneously, we have worked to preserve the environment, secure product safety and facilitate communication with society.

As a manufacturer, we believe that our mission is to help our customers conserve the environment and save energy through our products and technologies. In line with this belief, we have formulated the new corporate slogan "Possibility of Chemistry."

Furthermore, as we aim to live up to the trust of our shareholders and investors, we are continuously strengthening our corporate governance. We are also enhancing human resource development programs while creating a workplace environment and a personnel system that encourage every employee to realize their full potential. Having established the Denka Principles as a guide for the business conduct of Group members all around the world, we will strive to contribute to the creation of a better society, with every employee being fully aware of their social responsibilities.



Manabu Yamamoto
Director, Managing Executive Officer,
General Manager of Corporate Planning Dept.,
CSR & Corporate Communications Dept.

Major CSR Initiatives Undertaken in Fiscal 2014

1. Our safety activities evaluated by external specialists

Drawing lessons from two major accidents in 2013 (a heat blast from an electric furnace at the Omi Plant and a fire in a non-operational facility at the Chiba Plant), we formulated countermeasures aimed at preventing the recurrence of such accidents. We then invited external safety specialists to examine our safety activities and the aforementioned countermeasures.

2. Strengthened corporate governance

We increased the number of outside directors by one while decreasing the total number of directors by two pursuant to a resolution passed at the ordinary General Meeting of Shareholders held on June 19, 2015. We also appointed a Chief Compliance Officer on July 13, 2015.

3. Streamlined information disclosure items based on materiality and our value creation process

In the process of compiling the *CSR Report 2015*, we reviewed information disclosure items in four categories, namely, 1) corporate governance; 2) labor management and employee education; 3) environmental, facility security and worksite safety activities; and 4) business operations, streamlining said items based on their materiality. In the category of business operations, we examined each business model in order to reconfirm value creation processes.

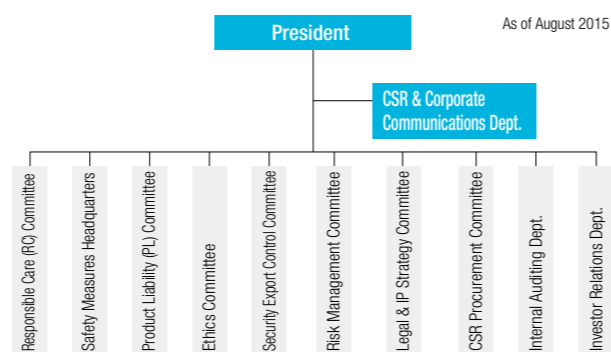
4. Aggregated Groupwide environmental information

To ensure the more accurate reporting of environmental data from Group members around the world, we reconfirmed such factors as computational conditions. In addition, we launched a task force aimed at addressing the problem of climate change and began calculating certain Scope 3 greenhouse gas emissions.

CSR Promotion Structure

To promote its CSR activities, Denka established a CSR promotion structure spearheaded by the president and consisting of the CSR & Corporate Communications Department and other specialized bodies. When major issues arise, specialized committees under the direct control of the president decide on actions to be taken. The CSR & Corporate Communications Department has been systematically developing an in-house structure to promote CSR, facilitating the understanding of all Group employees to ensure their wholehearted engagement in CSR activities and publishing these activities' results in the CSR report.

CSR Promotion Structure



CSR Promotion Challenges, Targets and Performance

Disclosure items	Challenges	Fiscal 2014				Major Challenges and Goals in Fiscal 2015 and Beyond
		Targets	Results	Pages	Rating	
Customers	<ul style="list-style-type: none"> Stable supply of high-quality products and the development of economical products 	<ul style="list-style-type: none"> Supply reliable and safe products Develop and market products that benefit the environment and society 	<ul style="list-style-type: none"> Introduced a system to handle customer complaints and requests Promoted product development aimed at facilitating energy saving and environmental load reduction Developed overseas business network for special cement additives (China and Southeast Asia) Launched a new ultra-pure acetylene black production facility 	P14-23	B	<ul style="list-style-type: none"> Step up R&D through the Denka Innovation Center to pursue in-house collaboration as well as joint initiatives with external organizations Establish a structure for developing products and businesses that benefit the environment and society
Corporate Governance	<ul style="list-style-type: none"> Raising CSR awareness and promoting CSR activities Strengthening corporate governance structure and promoting compliance education 	<ul style="list-style-type: none"> Nurture a CSR mindset Provide training on legal matters 	<ul style="list-style-type: none"> Increased the number of outside directors (from two to three) and decreased the number of in-house directors (from seven to five) to strengthen corporate governance Conducted training sessions related to legal matters at each business site Provided new recruits and other Group employees with a CSR activity-themed educational program 	P26-27	B	<ul style="list-style-type: none"> Develop a more robust in-house CSR promotion structure and nurture a CSR mindset (CDP task force)
Safety Activities	<ul style="list-style-type: none"> Ensuring facility security and disaster prevention while building and maintaining relationships of trust with local community members Maintaining occupational safety and health while creating a vibrant and comfortable working environment 	<ul style="list-style-type: none"> Secure occupational safety and health (eliminate occupational accidents) Ensure adherence to basic safety rules by on-site workers, facilitate worksite communication, create a vibrant and lively workplace and enhance employee education Apply a security evaluation system 	<ul style="list-style-type: none"> Conducted exhaustive on-site inspections centered on facilities handling high-temperature substances and the successive execution of facility improvements to prevent the recurrence of major accidents in 2013. These measures were subject to third-party verification by Dr. Masayoshi Nakamura, a visiting professor at the Graduate School of Tokyo Institute of Technology, and were evaluated as appropriate. Failed to decrease the number of occupational accidents. Recognizing that many accidents were attributable to a lack of managerial involvement and poor worksite communications, we will institute a top-down effort encompassing safety basics and the review of case studies to enhance each employee's safety-related skill level Introduced a security capability evaluation system to objectively verify safety at CM4 styrene monomer production facility at the Chiba Plant. Plans call for introducing this system at other production sites, thereby facilitating safety-oriented corporate culture 	P28-31	C Failed to decrease the number of occupational accidents	<ul style="list-style-type: none"> Establish the Basic Policy for Workplace Safety, Health, Security and Disaster Prevention, which declares "We put the utmost priority on worksite safety and health, facility security and disaster prevention in all aspects of our business activities." Bring the number of major accidents and disasters to zero Continuously improve the number of occupational accidents
Environmental Activities	<ul style="list-style-type: none"> Prevention of global warming (CO₂ emissions reduction), curbing chemical substance emissions, waste reduction, technological innovation for energy conservation 	<ul style="list-style-type: none"> Implement the Fifth Medium-Term Environmental Plan (systematically reduce CO₂ emissions, PRTR substances and other environmental load substances) Promote RC activities 	<ul style="list-style-type: none"> Initiated the construction of the New Omigawa Power Plant and preparatory survey for the construction of the New Himekawa Power Plant No. 6 (Kurobega Electric Power Company) Implemented the Fifth Medium-Term Environmental Plan <ul style="list-style-type: none"> 1) Achieved the target for energy consumption intensity: 0.95 compared with fiscal 2012 level (target: 0.97). Thanks to the improved operational efficiency of chloroprene production facilities, the successful overhaul of styrene monomer production facilities aimed at saving energy, the increased capacity of in-house hydroelectric power generation facilities and other factors 2) Missed the target for CO₂ emissions intensity: 1.00 compared with fiscal 2012 level (target: 0.98). The CO₂ emissions intensity of purchased electric power deteriorated 3) Achieved the target for emissions of PRTR substances: 76t (target: 92t). Made progress in the switchover to aqueous solvents for industrial tape adhesives at the Chiba Plant 4) Achieved the target for the volume of final waste disposal: 156t (target: 178t). Thanks to a decrease in overall waste generation and effective utilization through recycling 	P32-34	C Targets partially unmet	<ul style="list-style-type: none"> Implement the Fifth Medium-Term Environmental Plan (priority items: the prevention of global warming and continuous reduction of industrial waste) Promote RC activities and reinforce Groupwide environmental management encompassing affiliates and overseas subsidiaries
Employees	<ul style="list-style-type: none"> Inclusive and rewarding workplaces 	<ul style="list-style-type: none"> Step up health promotion initiatives, including a program to address mental health problems Implement initiatives under the Action Plan for General Business Operators (ensure that each employee takes at least 12 days of annual paid leave, streamline operations and reduce overtime work) 	<ul style="list-style-type: none"> Promoted revisions to the personnel system. Made it possible to change job category from general staff or engineer to specialist Introduced the "Engineers' Promotion Plan" to promote outstanding engineers to advanced positions Launched the in-house "Meister Certification System" for outstanding employees Allowed employees to opt for shorter working hours until their child finishes the third grade of elementary school Made it possible for employees to apply to change work locations when spouses are transferred Implemented the "Career Returner Plan" allowing the reinstatement of employees who have resigned due to family duties, including nursing care and child rearing Implemented the Mental Health Promotion Plan 	P36-39	B	<ul style="list-style-type: none"> Reduce total working hours and facilitate the use of annual paid leave Encourage employees to take necessary childcare leave and nursing care leave Strengthen countermeasures against mental health problems while pursuing the implementation of the Mental Health Promotion Plan Secure more foreign student recruits and step up long-term training programs in Japan
Supply Chains	<ul style="list-style-type: none"> Promote CSR in tandem with supply chains 	<ul style="list-style-type: none"> Communicate such information as the CSR Procurement Policies and Guidelines to supply chains 	<ul style="list-style-type: none"> Sent out questionnaires to the key suppliers who represent 70% of Denka's raw material supply chain and obtained responses from the half of recipients, with all respondents approving Denka's CSR Procurement Policies 	P40	A	<ul style="list-style-type: none"> Engage in a more robust dialogue toward the promotion of CSR procurement mainly with suppliers who failed to respond to the questionnaires
Stakeholders General Public and Local Communities	<ul style="list-style-type: none"> Initiatives as a good corporate citizen, such as robust communication with local communities and social contribution activities 	<ul style="list-style-type: none"> Promote interaction with community members and social contribution activities at business sites throughout the Group Continue volunteer activities to support disaster-stricken areas 	<ul style="list-style-type: none"> Provided plant tours and host exchange gatherings at business sites throughout the Group Hosted experimental chemical classes in each region and participated in the Summer Holiday Chemical Experiment Show for Children Helped revitalize local communities through events at DENKA BIG SWAN STADIUM (to which Denka holds the naming rights) and support for the NIIGATA Albirex BB Rabbits Proactively accepted and recycled for use in cement production waterworks sludge and industrial waste from Niigata City and other municipal bodies Dispatched employee volunteers to Minami Sanriku-cho through the Disaster Area Volunteer Support Program Assisted students who grew up in the vicinity of Denka business sites with their pursuit of higher education through a scholarship program Contributed to youth education and social welfare by sponsoring and assisting the Fureai Trio concerts 	P35 P41	A	<ul style="list-style-type: none"> Maintain robust communications with communities around business sites while contributing to the revitalization of local society Undertake comprehensive reviews of the status of local community and social contribution activities being implemented across the Group and provide feedback to individual business sites Continuously implement volunteer activities to support disaster-stricken areas
Governmental/External Institutions	<ul style="list-style-type: none"> Proactive engagement in public policies and activities aimed at resolving social issues 	<ul style="list-style-type: none"> Utilize subsidy schemes to pursue R&D projects and advance energy-saving and other environment-friendly technologies 	<ul style="list-style-type: none"> Drew on the public subsidy schemes to execute production facility upgrades aimed at reducing environmental burdens and energy consumption and constructed manufacturing plants for new energy-saving products 	P12-13 P22-23	A	<ul style="list-style-type: none"> Continue utilizing subsidy schemes to pursue R&D and the improvement of energy-saving and other green technologies and apply such technologies
Shareholders and Investors	<ul style="list-style-type: none"> Enhancing corporate information disclosure and ensuring its reliability 	<ul style="list-style-type: none"> Ensure timely and appropriate information disclosure to strengthen the relationships of trust Execute the business plan and return profits to shareholders 	<ul style="list-style-type: none"> Implemented new growth strategies toward achieving the goals set forth in the Denka100 management plan (consolidated operating income of ¥60 billion or more in fiscal 2017) Executed shareholder returns through the payment of dividends and purchase of treasury stocks Enhanced CSR-related information disclosure while seeking a third-party opinion to secure its reliability 	P42-43	A	<ul style="list-style-type: none"> Enhance CSR-related information disclosure and ensure its reliability Promote new growth strategies toward achieving the goals set forth in the business plan (final year set at fiscal 2017) Disclose information on environmental management including initiatives to prevent global warming

A: Achieved significant results **B:** Observed some results **C:** No results were observed **D:** The level of activity deteriorated

Corporate Governance

We Will Remain a Company Worthy of Society's Trust by Maintaining a Fair and Transparent Corporate Structure.

Corporate Governance Structure

We have adopted an Audit & Supervisory Board System as the basis of our Corporate Governance System. Said board includes two outside members to assess operations and management, thereby ensuring that our business properly serves stakeholders.

Similarly, the Board of Directors has two (three from June 19, 2015 onward, details explained in the following) independent outside members. Moreover, there are no hierarchical relationships between directors, so each is free to oversee and supervise business execution.

Moreover, we have in place a Management Committee, composed of directors, members of the Audit & Supervisory Board and selected executive officers, to streamline and accelerate deliberation on important managerial matters. For individual items entailing budget planning and capital investment, we set up special committees or deliberative councils by function.

Board of Directors and Executive Officers

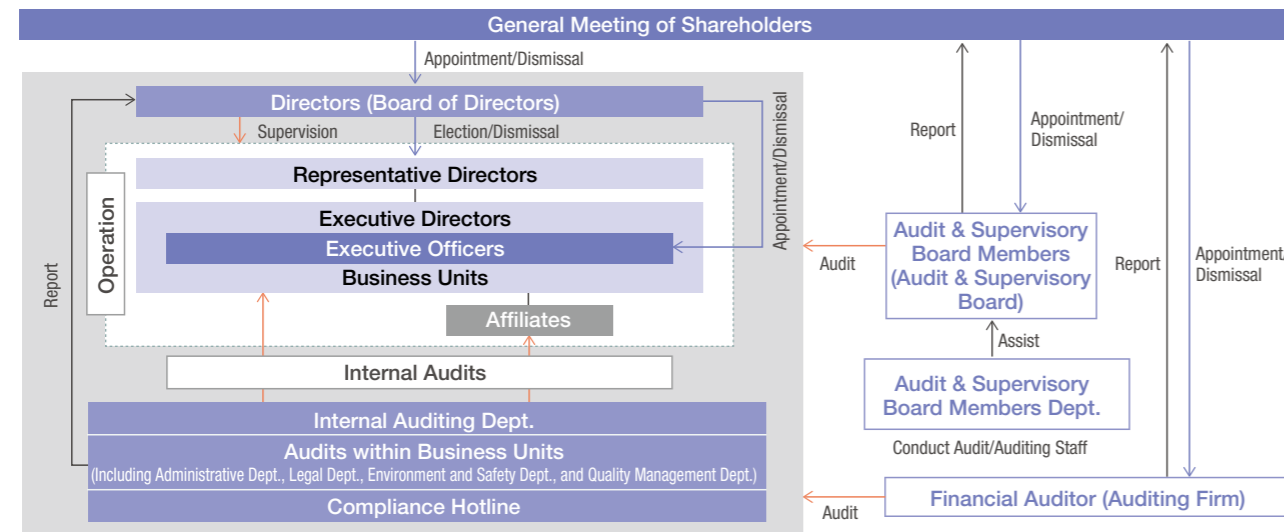
With the aim of enhancing its corporate governance, Denka has clarified the separation of executive officers' business execution and the Board of Directors' supervisory functions.

To further enhance management transparency and soundness, we increased the number of outside directors (from two to three) while reducing the total number of Board members (from 12 to 10) based on a resolution passed at General Meeting of Shareholders held on June 19, 2015.

The three outside directors and two outside Audit & Supervisory Board members are all registered as independent directors/auditors under the rules of Tokyo Stock Exchange Inc. They maintain sufficient independence while retaining extensive knowledge in their areas of specialty, ensuring the stringent supervision of the Company's management.

Looking ahead, we will strengthen our management structure through aggressive expansion while introducing preventive initiatives as we aim to better adapt to the globalization of our operating environment and the advance of information communication technologies.

Corporate Governance System



Comments from Outside Directors

Q What are your policies and goals as Denka's outside director?

A My creed is to make a wholehearted commitment. By offering reviews from a fresh perspective, I would like to help enhance Denka's corporate value.

Tadashi Hashimoto

A My watchwords are rationality and fairness. Based on my experience at a global enterprise, I would like to contribute to Denka's sustainable growth and enhancement of corporate value.

Yasuo Sato
(appointed on June 19, 2015)

A It is my earnest desire to do everything I can to further the Company's sound development and raise its corporate value from a medium-to long-term global perspective.

Akio Yamamoto
(appointed on June 19, 2015)

Internal Control Reporting System

Denka strives to secure the reliability of its financial statements and, to this end, has set up an internal control reporting system that complies with Japan's Financial Instruments and Exchange Act while conducting audits in line with the "Standards for Management Assessment and Audit concerning Internal Control Over Financial Reporting" formulated by the Business Accounting Council of the Financial Services Agency. In these ways, we are swiftly addressing any problems that are discovered.

Based on the results of fiscal 2014 assessments and audits, our internal control report declared that the Denka Group's internal control was effective. Moreover, the attached certificate prepared by the independent accounting firm that audited the report (ERNST & YOUNG SHINNIHON LLC) concluded that all significant aspects of disclosure were proper.

Compliance

Compliance is essential for sustainable growth. We accordingly adhere to internal rules and government legislation and refrain from acts that violate moral and ethical norms. The Denka Group Ethics Policy was established in 2002 to codify Groupwide standards of conduct, while the Ethics Committee, chaired by the president, oversees the overall compliance structure and reports to management, thereby ensuring adherence to this policy. Moreover, the Legal, Environment and Safety, Intellectual Property and other departments ensure thorough compliance pertaining to their respective specialties. Employees are provided with compliance education under the initiative of the Human Resource Development Center.

Risk Management Overview



Compliance Hotline System

We have set up and operate the Compliance Hotline in keeping with the Denka Group Ethics Policy. This system covers any shortfalls in our internal control and compliance systems by enabling us to address any organizational problems that may arise.

The hotline accepts calls on actions that may or do violate that policy. The Ethics Committee quickly addresses reports.

The hotline's mandate is to be fair and swift and dedicated contacts are in place at the Audit & Supervisory Board Members Department and the labor union, which maintain neutral stances, as well as at the Ethics Committee Administrative Office and general affairs sections within all offices. People can also send reports to an external law firm acting as a totally independent reporting channel. In addition to domestic contacts via phone or email, overseas subsidiaries have set up their own hotlines, reflecting our policy of providing various reporting channels. During fiscal 2014, we registered four reports internally while receiving one report from an external source. These reports were handled appropriately.

The hotline is made known to employees as it is explained within education programs on the aforementioned Ethics Policy. In addition, that policy specifically safeguards whistleblowers from discrimination and mistreatment.

Risk Management

An essential part of corporate governance is understanding the diverse and numerous risks inherent in corporate activities and exerting proper risk control. In general, each business unit is responsible for identifying and managing its specific risks. For environmental, safety, product liability and export control issues that affect the entire Company, we have in place special sections and permanent committees to handle matters. We have also appointed a team of specialists to audit our Group subsidiaries for their risk management.

We formulated our Risk Management Guidelines to comprehensively tackle incidents that may have major impact on corporate activities. In addition to the permanent Risk Management Committee, we set up the Crisis Measures Headquarters to act whenever contingencies arise.

Our Initiatives to Maintain Safe Operations

To Create a Lively and Sound Workplace, We Are Facilitating Worksite Communication While Involving All Workers in Safety Activities.

Putting the utmost priority on safety, we will strive to become a company deserving the trust of society, with every employee working together to create a vibrant workplace where no accidents or disasters occur.

In April 2015, we established our Basic Policy for Workplace Safety, Health, Security and Disaster Prevention, declaring that we put the utmost priority on safety as a foundation for all business activities. Setting a new course for the next 100 years, we have reconfirmed our basic stance of maintaining safety, thus renewing our commitment to relentlessly striving to foster a safety-oriented corporate culture.



Mitsukuni Ayabe
Representative Director,
Senior Managing Executive Officer,
Assistant to CEO, RC Committee Leader

Basic Policy for Workplace Safety, Health, Security and Disaster Prevention

We put the utmost priority on worksite safety and health, facility security and disaster prevention in all aspects of our business activities.

To fulfill our social responsibilities as a chemical company, we put the utmost priority on safety as our basic stance for operations, thereby working together to create a lively and sound workplace and becoming a company capable of eliminating accidents and disasters and worthy of society's trust.

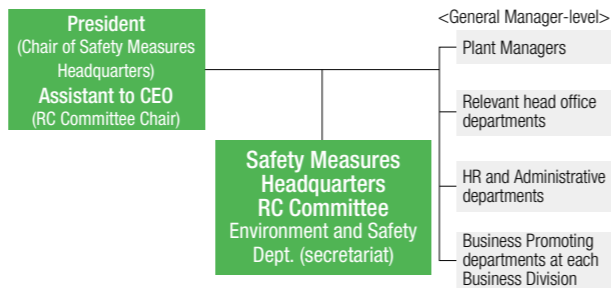
April 1, 2015
Chair of the Safety Measures Headquarters
(President & CEO)



President Shinsuke Yoshitaka speaking about safety assurance operations at the Shibukawa Plant

Safety Management Structure

Safety Management Overview (Safety Measures Headquarters, etc.)



Major Safety Activities in Place

- Annual safety review meetings and on-site inspections are held at each R&D and manufacturing base in Japan and overseas to assess the implementation status of occupational safety management plans and RC policies.
- Each chemical plant holds safety management conferences to review technological standards for security and disaster prevention and to inspect the status of facility maintenance, processes for managing facility changes and countermeasures against facility accidents and failures.
- Our manufacturing frontline leaders spearhead initiatives to share safety best practices between business sites and with our affiliates* by hosting safety networking meetings and other gatherings themed on areas of their specialties.



A meeting on styrene monomer production (Chiba Plant)

* Denka Head Office's Environment and Safety Dept. supervises the safety records and environmental data of our five major affiliates (Denka Polymer Co., Ltd., Denka Seiken Co., Ltd., CRK Corporation, Hinode Kagaku Kogyo and Denka Azumin Co., Ltd.), thereby assisting them with their safety assurance activities.

Fiscal 2014 Accident Records and Safety Assurance Activities

1. Initiatives to Prevent Major Accidents

We have stepped up initiatives to prevent major accidents and disasters from occurring, drawing lessons from two accidents in fiscal 2013, namely, a heat blast from the Omi Plant's electrical furnace and a fire during the removal of a non-operational facility at the Chiba Plant.

As for the former accident, we took heed of instructions from authorities while clearly prioritizing steps to be implemented to prevent recurrences. Moreover, we have exhaustively inspected other facilities handling high-temperature substances, leveraging insights we gained by studying the accident. As for the latter accident, we shared such information as the results of fire experiments, which we conducted to test materials packed inside the distillation tower, with related departments and contractors in charge of facility construction.

Moreover, we stepped up mutual inspections between business sites as well as internal diagnoses performed by the Head Office departments in charge of managing facility security. We have also received objective evaluations from the Japan Society for Safety Engineering (JSSE), identifying issues that would have otherwise gone unnoticed. These evaluations have led us to implement practical training aimed at enhancing our responsiveness to emergencies and other new initiatives. (Please also see page 31 for ongoing initiatives related to the two major accidents in fiscal 2013)



Mr. Higashi Ito, Chairman of JSSE, giving a lecture at the Chiba Plant

2. Initiatives to Eliminate Occupational Accidents to Zero

In fiscal 2014, the number of occupational accidents we recorded totaled 22, a minor improvement from 23 in fiscal 2013. We were also able to decrease accidents involving absence from work. This was attributable to the success of safety assurance activities in which everyone working at Denka plant participates—whether he/she is from Denka or subcontractors—and the resulting improvement in worksite communication, especially between those engaged in facility construction.

However, we also saw multiple incidents of accidents similar to others we have seen in the past. Among them, the aforementioned Chiba and Omi plants again experienced accidents in the first half of fiscal 2014. We reconfirmed that in order to break the cycles leading to such accidents, our plants' top management and frontline leaders must engage in face-to-face dialogue to overhaul our safety assurance activities. We will therefore put further emphasis on such communication with the aim of ensuring that every plant worker thinks and acts with a sense of ownership.

The number of accidents at our affiliates totaled seven, representing a year-on-year decrease in occurrence at both their domestic and overseas business sites. Looking ahead, we will implement Groupwide initiatives including networking meetings between workplaces and mutual worksite patrols.



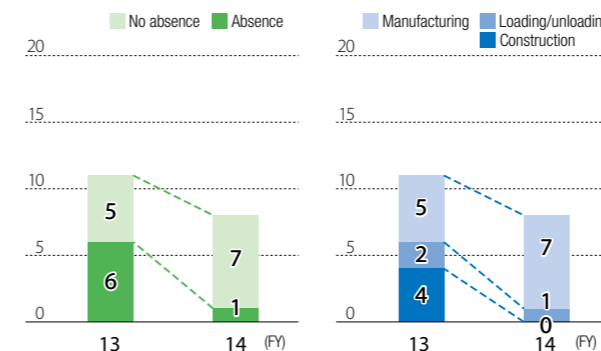
Checking daily worksite communication before the construction begins

The Number of Occupational Accidents¹⁾

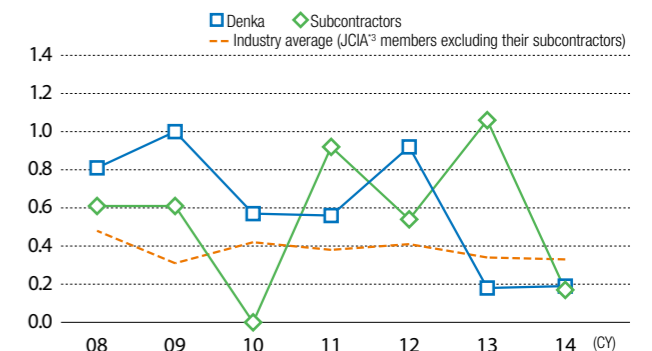
	Denka							Affiliates					
	Directly managed sites		Subcontractors		Total			Japan			Overseas		
	Absence	No absence	Absence	No absence	Absence	No absence	Total	Absence	No absence	Total	Absence	No absence	Total
Fiscal 2013	1	11	6	5	7	16	23	3	7	10	2	4	6
Fiscal 2014	2	12	1	7	3	19	22	4	2	6	0	1	1

¹⁾ Number is calculated on the fiscal year basis.

The Number of Occupational Accidents at Subcontractors



Accident Frequency Rates²⁾



²⁾ Rates are calculated in accordance with the instruction of the labor standards inspection office and JCIA guidelines.
³⁾ Japan Chemical Industry Association

Examples of Our Initiatives to Eliminate Accidents to Zero



Comprehensive emergency drill (Omi Plant)



Worksite patrol (Omuta Plant)



Kickoff meeting for a zero-accident and disaster activity (Chiba Plant)



Safety training incorporating danger simulations (Iseaki Plant)



Safety review meeting (Ofuna Plant)



Lecture on the use of an Automatic External Defibrillator (Shibukawa Plant)

3. Facility-Related Incidents

Facility-related incidents in fiscal 2014 are as follows:
 Fire or explosion: Two incidents (a fire from exhaust gas combustion treatment equipment at the Shibukawa Plant and a fire resulting from oil leakage from a punch machine at the Omi Plant)
 Facility damage: One incident (a dust collector at the Omuta Plant burst)
 Fortunately, the fires were quickly put out on the first attempt. Also, the burst collector caused only some minor property damage. We have formulated and implemented countermeasures to prevent the recurrence of such incidents while enforcing the strict management of the safety system. We are also rolling out these measures to other facilities that have similar risks.

4. Fiscal 2015 Action Plans

We will ensure that our basic policy of putting the utmost priority on safety is adopted by every worker. We will also raise their sense of ownership regarding Companywide safety assurance activities, developing a more robust foundation for safety assurance operations and facilitating a safety-oriented corporate culture.

Fiscal 2015 Occupational Safety Management Plan

Companywide targets

- 1 Reduce the number of major accidents and disasters to zero
- 2 Continually improve the occupational safety record

Priority initiatives

- 1 Create a lively and sound workplace
 - Facilitate worksite communication to ensure the ongoing reduction of potential dangers and eliminate accidents attributable to operator action
 - Promote safety assurance activities in which each worker is able to grasp the worth of their efforts
- 2 Step up hazard prediction systems aimed at preventing major accidents and facility-related incidents
 - Leverage case studies of accidents at Denka and other companies
 - Utilize systems developed by industrial associations to assist with safety assurance operations

Report on Ongoing Initiatives Related to the Two Major Accidents in Fiscal 2013

In fiscal 2013, we experienced two major accidents, namely, a fatal accident at the Omi Plant as a result of heat blast from electrical furnace in June and a fire at the Chiba Plant in an obsolete distillation tower in the styrene monomer production facility as it was being taken down in July. Once again, we would like to sincerely express our condolences to the bereaved family of the victim. We also extend our deepest apologies to those living in the areas

near the plants and businesses operating there as well as relevant authorities for any trouble and anxiety caused by these accidents.

To prevent such accidents from recurring, we have reconfirmed our basic stance of putting the utmost priority on safety while implementing countermeasures based on advice from external specialists. Simultaneously, we are facilitating a safety-oriented corporate culture.

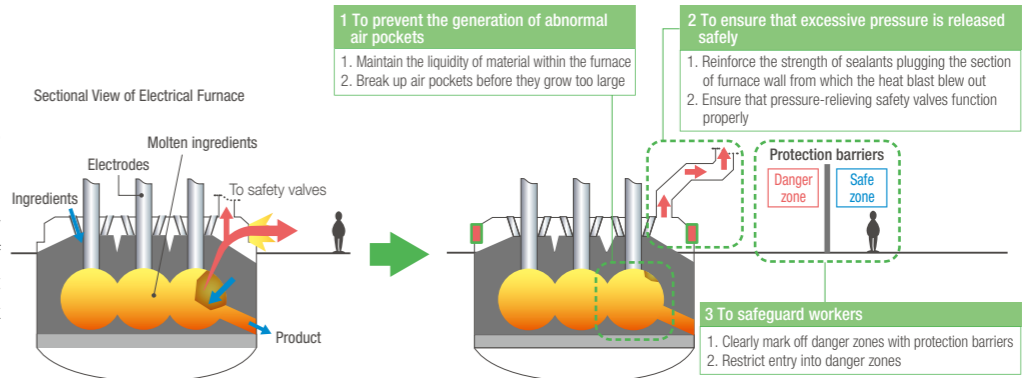
The status of countermeasures aimed at preventing the recurrence of the heat blast accident at the Omi Plant is presented in the diagram below. In October 2014, we received the objective evaluation of these countermeasures by Dr. Masayoshi Nakamura, a visiting professor at the Tokyo Institute of Technology.

Meanwhile, we have safely completed the removal of the non-operational facility at the Chiba Plant. Drawing lessons from this accident, we are proactively utilizing case studies on incidents at Denka and other companies to enhance our hazard prediction activities.

Countermeasures to Prevent the Recurrence of the Heat Blast from the Electrical Furnace (Omi Plant)

The Mechanics behind the Accident

- 1 Material adhered to the inside walls around the feed chute and lost liquidity, leading to the creation of a superheated air pocket in the furnace
- 2 The air pocket was suddenly filled by a massive fall of material; the resulting heat blast vented through a weak point in the furnace wall



Third-Party Opinions on Countermeasures Installed at the Omi Plant

Having performed a two-day on-site inspection and in-depth interviews with regard to the accident and the subsequent countermeasures put in place afterward, I concluded that the Omi Plant has thoroughly investigated the causes of the accident and implemented steps to prevent recurrences based on the following concepts.

1. Address root causes of accidents to mitigate intrinsic danger from the process in question
2. Ensure that the safety system is fully functional and ready to deal with emergencies
3. Safeguard on-site workers so that they are not harmed even when an extraordinary incident happens
4. Share information on the accident, countermeasures and residual risk with related persons within and outside the organization

In addition, I recommend the Company perform an objective verification of the effectiveness of the aforementioned steps after a certain period of time. These steps should then be codified into written rules. Related internal discussions must be documented to preserve the

lessons gleaned from the accident for the next generation. Also, the Company should appoint specific persons to be in charge of dealing with subcontractors and make sure that subcontractors do the same, so that communication between two sides is unmarred by omission or oversight.

Having visited manufacturing sites, I was impressed that every plant worker seemed to be well instructed. They were properly exchanging courtesies while meticulously performing the 3-Ss, namely, *Seiri* (sort), *Seiton* (set in order) and *Seiso* (shine). Although it is predicted that Japan's manufacturing industry will face an even harsher business environment, I believe that the Omi Plant can thrive by building further on the Company's 100-year heritage. I expect it to be a place where every worker can have great hope for the future. Have a safe day!

Masayoshi Nakamura

Visiting Professor, Graduate School of Innovation Management, Tokyo Institute of Technology



Caring for the Global Environment

Focusing on Responsible Care Activities, We Seek to Reduce Energy and Resource Consumption and Environmental Burdens throughout the Life Cycles of Our Products.

Promoting Environmental Management Aimed at Ensuring the Sustainable Use of Resources and Energy

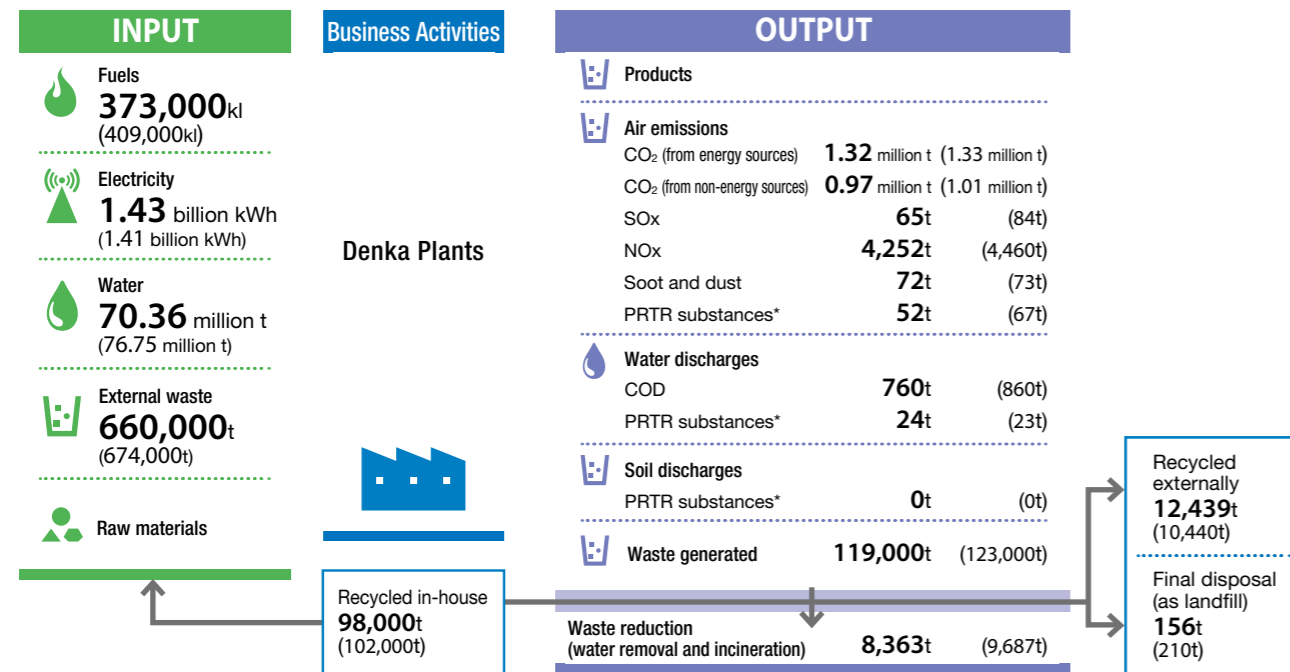
Pursuing lasting trust as an outstanding manufacturer, Denka pursues CSR activities from the economic, social and environmental perspectives. As part of these activities, we began disclosing information on our greenhouse gas (GHG) emissions employing the CDP* scheme, which covers the entire value chain. In these ways, we are promoting environmental management aimed at ensuring the sustainable use of resources and energy while enhancing our corporate value.

* Carbon Disclosure Project: A London-based NPO run by an association of institutional investors with the aim of encouraging businesses to disclose their environmental strategies and the status of their GHG emissions.



Tetsuya Shinmura
Executive Officer, Technology Div.,
Leader of CDP Task Force

Overview of Environmental Impacts (totals for all production sites in fiscal 2014)



This environmental impact data encompasses Denka's plants and main affiliates within those facilities.

Major plants / Omi, Omuta, Chiba, Shibukawa, Ofuna, Iseaki

Major affiliates / Omi Plant > Denal Silane Co., Ltd., Denak Co., Ltd. Chiba Plant > TOYO STYRENE Co., Ltd., Taiyo Vinyl Corp.

* PRTR substances calculation excludes TOYO STYRENE Co., Ltd. and Taiyo Vinyl Corp. inside the Chiba Plant. Waste emissions calculation excludes TOYO STYRENE Co., Ltd. Note: Figures in parentheses are fiscal 2013 figures and are provided for the purpose of year-on-year comparisons.

Explanation of Inputs

Fuels are the sum of all fuels used at each production site, converted into calorific crude oil equivalents. They include fuels for in-house power plants.

Explanation of Outputs

CO₂ emissions from energy sources represents emissions from in-house fuel consumption and from electricity purchases. CO₂ emissions from non-energy sources cover mainly the portion that is derived from raw materials.
COD is the BOD discharge into rivers converted into COD values.

External waste recycling covers materials converted externally into resources or fuel.
Final disposal refers to material buried on Company premises or at external landfill sites.

Status of Fifth Medium-Term Environmental Plan

Energy

In fiscal 2014, the energy consumption intensity was 95% of the fiscal 2012 level, meeting our target of 98% or less. This was mainly attributable to the steps taken to enhance the efficiency of our chloroprene rubber production facilities, upgrades of styrene monomer production facilities and an increase in output from our in-house hydroelectric power plants. We are continuing to implement facility upgrades aimed at reducing energy consumption while enhancing the efficiency of in-house power generation.

CO₂

In fiscal 2014, the CO₂ emissions intensity was 100% of the fiscal 2012 level, failing to meet the reduction target of 98% or less. Factors contributing to this result included the deterioration of CO₂ emissions intensity attributable to purchased electricity, which outpaced the effect of such energy-saving efforts as facility upgrades.

Fifth Medium-Term Environmental Plan

Items	Fiscal 2013		Fiscal 2014		Fiscal 2015
	Target	Result	Target	Result	Target
Energy consumption intensity (fiscal 2012 base)	0.99	0.97	0.97	0.95	0.96
CO ₂ emissions intensity (from energy sources: fiscal 2012 base)	1.24 (0.99)	1.24 (0.99)	1.22 (0.98)	1.25 (1.00)	1.20 (0.97)
Emissions of PRTR substances (tons)	95	90	92	76	88
Final landfill waste (tons)	177	210	178	156	176

Denka Signs Responsible Care Global Charter 2014

On December 9, 2014, Denka became a signatory to the International Council of Chemical Associations (ICCA) Responsible Care Global Charter 2014, declaring its support of Responsible Care principles and commitment to practicing such principles alongside other leading chemical manufacturers around the world.

Initiatives to Preserve Biodiversity

The ongoing construction of Denka's New Omi-gawa Power Plant involves building a dam, which will inevitably reduce the volume of water running in the river, as the plan calls for installing an inflow-type hydroelectric power generation system. We have been conducting various surveys to find ways of mitigating the negative impact of the facility on the river as well as on the landscape and surrounding environment, including the flora and fauna. The results of surveys are reflected in the specifications of this facility.

In particular, we are working with external specialists to minimize the impact on raptor species' habitat.

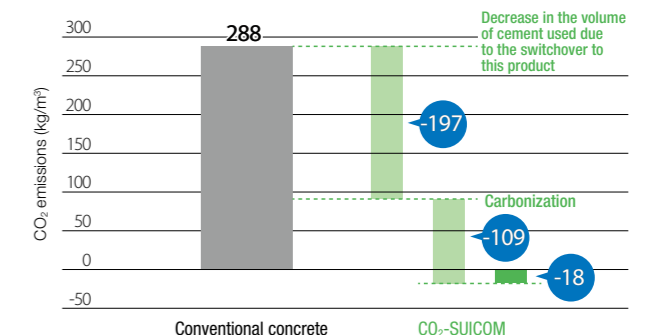
As the operational kickoff of this power plant is scheduled for 2018, we will ensure that careful consideration is given to the environment in the course of this construction project.

Environment-Friendly Products and Services

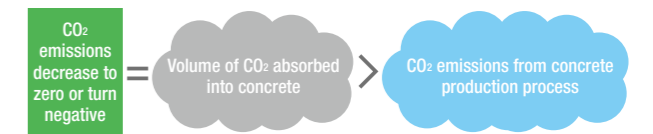
Denka boasts an array of environment-friendly products and services. (Please also see the web-based CSR Report 2015 references for details.) Environment-friendly products refer to products capable of contributing, directly or indirectly, to the reduction of environmental burdens—including CO₂ emissions, resource use and energy consumption or workload—throughout their life cycles, including during the manufacturing process.

Among these products are CO₂ SUICOM (CO₂ absorbing concrete), DENKA AN Plate and ALSINK (thermal conductive plates used in the power modules of rolling stock), all of which make significant contributions to CO₂ reduction. In the following section, we elaborate on the environmental performance of these products.

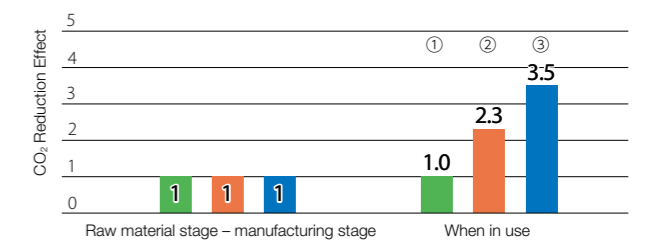
CO₂ Reduction Attributable to the Use of CO₂ SUICOM



Effects



CO₂ Reduction Attributable to the Use of DENKA AN Plate and ALSINK (Use in an IGBT inverter)



The changeover of rolling stock power modules from a Gate Turn-Off (GTO) thyristor to an Insulated Gate Bipolar Transistor (IGBT) inverter helps deliver a significant reduction in energy consumption during operation. The results of our calculations of CO₂ emissions reductions that can be achieved through the use of IGBT inverters incorporating DENKA AN Plate/ALSINK are shown in the graph. Conditions: An IGBT inverter consisting of a silicon chip, an electronic circuit substrate and a thermal conductive plate is used.

CO₂ emissions from the raw material processing through manufacturing stages are defined as 1.

The graph ① shows the reduction per unit cost of components, while ② shows the reduction attributable to the reduced number of components. The graph ③ shows the reduction purely attributable to the use of AN Plate/ALSINK.

Note: Calculations are based on the JICIA's Guideline for Calculating the Reduction in CO₂ Emissions.

Initiatives to Secure Our Electricity Supply

We Are Striving to Generate Clean Energy to Bolster Our Environment-Friendly Operations.

Initiatives to Utilize Clean Energy

Since its founding, Denka has been striving to augment the capacity of its hydroelectric power generation facilities while constructing new power plants.

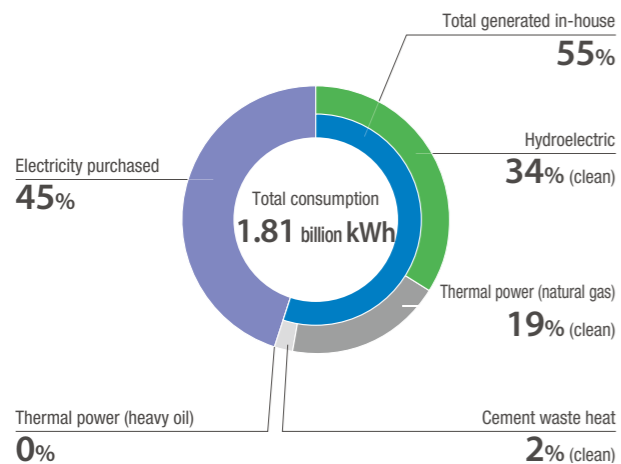
In fiscal 2014, Denka obtained permission to increase its annual water intake and raised the maximum output of its Oami Power Plant from 25,900kW to 28,400kW. This move is intended to more effectively utilize the river's current during high-water season (from the mid-April spring thaw to the end of July). As this approach has no impact on the river environment, we are considering rolling out similar measures at other power plants. Moreover, we are upgrading the facilities of the Kotakigawa Power Plant to achieve highly-efficient operations, thereby boosting the overall capacity of our power plants.

In addition, upstream of the Omigawa Power Plant the construction of the New Omigawa Power Plant (maximum output: approximately 8,000kW), launched in fiscal 2014, is progressing steadily. Meanwhile, Kurobegawa Electric Power Company, in which we hold half the equity, has initiated surveys to assess the potential environmental impact of the planned construction of its New Himekawa Power Plant No. 6 (maximum output: approximately 27,500kW).

Leveraging a scheme under the feed-in-tariff law for renewable energy, the Shibukawa and Isesaki plants have established mega solar power generation facilities, commencing the sale of electricity to Tokyo Electric Power Company in July 2013. In November 2014, the Isesaki Plant increased the capacity of its mega solar power generation facility by 200kW. The combined maximum output of solar power generation facilities at these two locations now amounts to 3,400kW.

To reduce CO₂ emissions from our thermal power generation facilities, we are promoting a fuel changeover from heavy oil to natural gas. At the Omi Plant's cement production facility, we operate a biomass boiler fed by scrap wood and utilize waste heat from cement production for power generation. Looking ahead, we will continuously promote the effective utilization of clean energy.

Power Sources in Fiscal 2014



Plant No.	Capacity (kW)	Plant No.	Capacity (kW)
1 Omigawa	3,300kW	9 Umikawa No. 3	2,600kW
2 Kotakigawa	5,200kW	10 Umikawa No. 4	900kW
3 Oami	28,400kW	11 Himekawa No. 6*	26,000kW
4 Otokorogawa	9,800kW	12 Takigami*	15,000kW
5 Yokokawa No. 1	10,000kW	13 Nagatsuga*	5,000kW
6 Yokokawa No. 2	16,000kW	14 Sasakura No. 2*	10,200kW
7 Umikawa No. 1	3,800kW	15 Kita-otari*	10,700kW
8 Umikawa No. 2	4,700kW		
16 New Omigawa*1	(8,000 kW)		
17 New Himekawa No. 6*1, 2	(27,500kW)		

Total maximum output of hydroelectric power generation: 118,150kW

Total maximum output of thermal power generation: 94,260kW

Total maximum output of Denka's in-house power generation: 212,410kW

*1 Output from the New Omigawa Power Plant, New Himekawa Power Plant No. 6 and solar power generation facilities are not included as these facilities' sole purpose is supplying electricity to external companies.
*2 Jointly owned with Hokuriku Electric Power Company
*3 Denka Solar Power Shibukawa

A Comment from the General Manager

With fiscal 2015 set as the target year, we have striven to increase the overall capacity of our hydroelectric power generation facilities 10% compared with the fiscal 2007 levels by enhancing power generation efficiency and by increasing water intake. Although we missed this target, we were able to increase the capacity by 8.5%, which, I believe, represents a significant step forward toward the greater utilization of clean energy.

In addition to augmenting the capacity of existing hydroelectric power plants, we have begun building a new power plant and are giving due consideration to the surrounding environment in the course of construction. We will continue to make the best use of resources available as we strive to contribute to society through environment-friendly corporate activities.

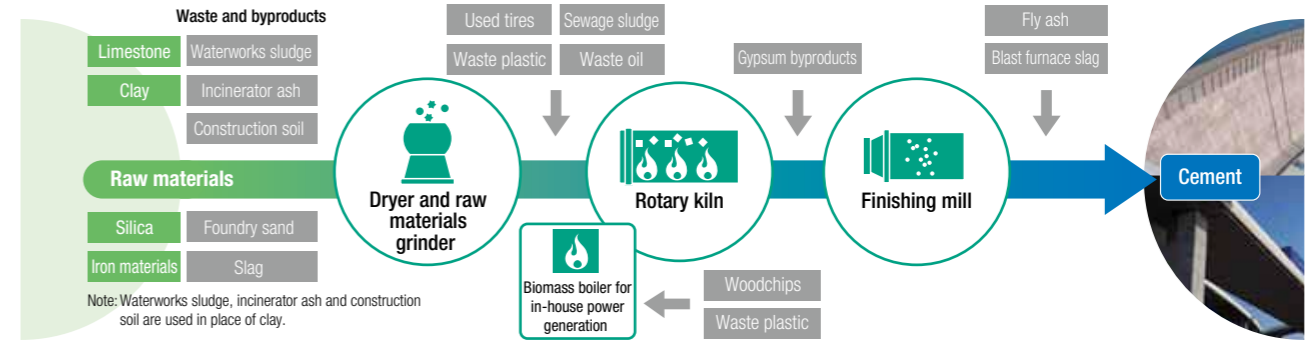
Shuichi Hirai
General Manager, Electric Power Dept., Technology Div.



Resource Recycling through Cement Production

As a Cement Producer, We Are Committed to Fulfilling Our Social Responsibility to Contribute to a Recycling-Oriented Society.

Recycling Process Flowchart



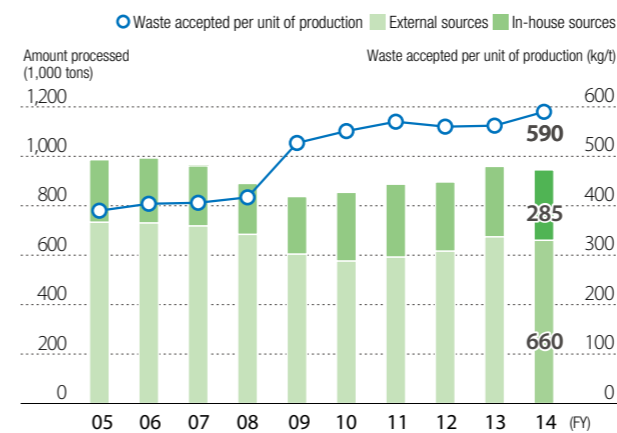
Recycling Business in Cement Production

The waste material recycling business at the Omi Plant involves the utilization of coal ash from thermal power stations, waste soil from construction sites, inorganic sludge from waterworks facilities, foundry sand left over from die-casting and industrial waste from the plant's facilities as raw materials for cement. The plant also receives organic sludge, recycled oil, automobile shredder residue (ASR) and waste plastic for use as fuel sources. Thus, the Omi Plant's recycling and cement production process is designed to minimize the generation of waste emitted to final disposal sites. This process also utilizes byproducts from metal manufacturers, including granulated blast furnace slag from steelworks as well as slag from non-ferrous metal production facilities, as cement materials.

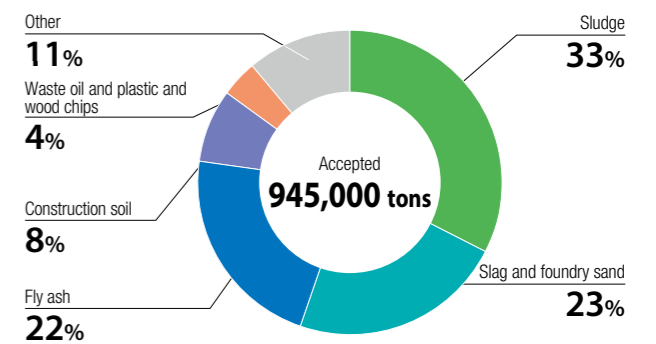
In fiscal 2014, Denka used 590 kilograms of waste and byproducts for every metric ton of cement produced.

The Omi Plant has a biomass power generation facility fed by scrap wood. This facility contributes a portion of the power used in cement production, bolstering the plant's policy of reducing the environmental impact of its manufacturing activities.

Volume of Waste Accepted (total and per unit of production)



Breakdown of Waste Accepted in Fiscal 2014



A Comment from the Manager

Following the 2013 Great East Japan Earthquake, Denka began accepting waterworks sludge from Niigata City on the condition that it met the clearance level for radioactivity (below 100Bq/kg). This initiative is still under way in line with our policy on social contribution. In connection with this move, Denka monitors the waterworks sludge, taking a variety of measurements and disclosing the results to citizens of Itoigawa City through the Itoigawa Municipal Office. Because the waterworks sludge is used as a cement raw material, we are also posting data on radioactive concentrations in cement products on our website, maintaining a stance of proactive information disclosure.

Going forward, we will proactively expand our facilities' waste processing capacities as well as the range of waste materials we accept. Simultaneously, we will work with other businesses that emit waste materials and local government bodies to help realize a recycling-oriented society.

Satoshi Anzawa
Manager, Resource Recycle Promoting Section, Cement Department



Engaging with Our Employees

Developing a Strong Workforce, We Are Fostering an Organizational Culture That Allows Every Employee to Realize Their Full Potential.

Nurturing People Who Can Proactively Think, Learn and Take Action While Creating a Rewarding Workplace

We have positioned human resource development as critical to strengthening our operating base and securing business growth. To survive amid a rapidly changing business environment, people must be action-oriented and capable of making prompt and accurate decisions. With this in mind, we have established programs aimed at nurturing proactive minds. These programs are updated every year under the initiative of the Human Resource Development Center.

Meanwhile, we are working to create a comfortable working environment that allows every employee to realize their full potential. For example, we are systematically offering greater career opportunities to highly-motivated employees. Moreover, we are eliminating excessive overtime, encouraging the full use of annual paid leave, upgrading childcare leave plans to help employees strike a good work-life balance and offering a program that facilitates the reinstatement of employees who have left the Company. We are thus striving to introduce various programs and plans aimed at promoting diversity.



Kenji Nakano
Managing Executive Officer,
Chief Compliance Officer (CCO),
Representative in China;
Secretary Dept., Administrative Dept., Legal Dept.,
HR Dept., DENKA100 Promoting Dept.

Fiscal 2014 Human Resource Development Initiatives and Results

1. Mandatory Job Level-Based Training

We provided those in their first and second years with educational programs aimed at enhancing presentation skills and boosting business documentation ability, respectively.

2. Special-Purpose Training

- In response to the enforcement of the revised law pertaining to the employment of the elderly, we held the Career and Life Planning Seminar, targeting specialists who had reached the age of 55. This program was intended to provide them with options regarding career development to the age of 65 and how to ensure satisfactory lives post retirement.
- We implemented overseas training programs for fifth-year technological specialists to encourage the adoption of diverse perspectives and develop such employees' competencies as engineers.

Message from the General Manager

We believe human resources are indispensable assets as they are one of the most crucial management resources securing Denka's future growth. Accordingly, as we have defined responsiveness to change, a drive to pursue higher goals and perseverance in the face of difficult challenges as desired traits of Denka employees, we ask all employees to proactively think, learn and take action. In support, we are implementing various human resource development initiatives to ensure that every employee can freely enhance their skills and potentials and pursue self-motivated career development.



Takao Shigihara
General Manager,
Human Resource Development Center

Content of Human Resource Development Programs (Fiscal 2015)

Mandatory job level-based training programs			Special-purpose training		Specialist courses	Denka Techno Schools	In-house academic meetings
Specialists	Engineers	General staff	Administrative skills	Technological skills			
New general managers (Class-9)	New Class-9		External training sessions (open seminars) Career and Life Planning Seminar Mental health training sessions (group- and self-care)		All job categories: Internal control, CSR, legal affairs, accounting, information technology, quality management, logistics, intellectual property, trade administration, English language and various correspondence courses	Manufacturing techniques, engineering, R&D, SQC, safety and health, plant maintenance, mental health (group- and self-care), legal affairs, labor management, accounting, English and Chinese	<ul style="list-style-type: none"> DENKA100 presentation meetings Results presentation meetings Technological symposia Analysis research presentation meetings Quality symposia Process symposia
New managers (Class-8)	New Class-8						
New assistant managers (Class-7)	New Class-7						
5th-year employees	Business unit training		Overseas study program at Beijing Language and Culture University Overseas training program	Technological networking meetings Process technology training Intellectual property and plant maintenance training Overseas study program Overseas training program	Technological job categories: Engineering and analysis techniques		
3rd-year employees							
2nd-year employees							
6-month employees							
New employees							

Our Structure for Promoting GCP Activities

The Good Company Program (GCP) is a Groupwide initiative involving both individual departments and cross-organizational teams formed to promote collaboration between sections. In fiscal 2014, a total of 150 departments and teams implemented their own GCP activities. The DENKA100 Promoting Department supervises these activities while DENKA100 Promoting Committee members are assigned to each section and business site to provide support.

GCP Activity Reports and Commendations

Every business unit and team that takes part in GCP activities formulates its own action plan, with its managers spearheading efforts to fundamentally improve safety, quality, cleanliness, human resource development and other concerns. Every six months, initiatives are reported on and results data shared among Group members via Denka's intranet. Departments and teams whose performance of said initiatives is judged outstanding are asked to give presentations at the biannual Denka100 presentation meetings. The Company president, officers, general managers of administrative departments and heads of business sites serve as judges and choose winners for GCP Grand Prizes, Excellent Prizes and Special Prizes. Moreover, the Denka100 Promoting Committee members separately review activity reports submitted by all business units Groupwide, and commend brilliant initiatives with the "GCP Activity Award."



Denka100 presentation meetings

Message from the General Manager

First initiated in 2004, our GCP activities have been going on more than a decade. Yet, I believe that the Company can enjoy further growth if each employee pursues GCP activities on their own, bringing a fresh perspective to daily tasks. Cumulatively, individual efforts can make a big difference. Having celebrated the centennial of our founding, we will pursue the creation of a "Good Company" by bolstering our operating base.



Nobuhiko Yagi
General Manager,
DENKA100 Promoting Dept.

Fiscal 2014 GCP Activities and Results

Outstanding Initiatives Introduced at the 20th Denka100 Presentation Meeting Themed on "Change"

On December 3, 2014, we held the 20th Denka100 presentation meeting at the Denka Innovation Center main building newly completed in April 2014. The event featured presentations by representatives from ten departments and units selected from domestic and overseas business sites and affiliates. With "Change" serving as the overarching theme, this round focused on reviewing areas in which improvements were made through GCP activities and how workplaces changed as a result.

Among the departments and units commended was the Osaka Branch, which has successfully improved its workplace environment by appointing a number of female employees as editors of internal magazines—a move that invigorated its GCP activities. Meanwhile, the Agri-Products Department's salespeople worked together to identify technological challenges based on customer feedback, lending momentum to the development of next-generation businesses. The 2nd Production Department of the Chiba Plant strove to pass on its technological heritage to younger employees in concert with its facility integration project aimed at optimizing the overall production system. Denka Advantech Private Limited (DAPL), a Singapore-based Group subsidiary, carried out praiseworthy safety and quality assurance activities in the course of launching a new production facility. These activities were evaluated as outstanding and deserving prizes as they nicely exemplified the overarching theme "Change."

GCP Grand Prize
Osaka Branch
How do we effect "Change?"



Excellent Prize
Agri-Products Dept.
Meeting the needs of a changing agricultural market



Excellent Prize
Chiba Plant 2nd Production Dept.
Integration of the ABS and KJ finishing processes



Special Prize
DAPL
Building a safe and efficient production system



Developing Comfortable Workplaces

► Underlying Policy

Along with our efforts toward the creation of a better society through our business activities, we have placed fundamental emphasis on ensuring that all employees can take pride in their duties while being free to enjoy positive and fulfilling lives. Specifically, we believe that one key to the success of the new growth strategies under the Denka100 management plan lies in the steady and quiet day-to-day contributions of individual employees. To become a “Good Global Company” capable of growing over the next 100 years, we are thus fostering a corporate culture that helps each employee develop their full potential and maximizes organizational strength and performance.

► Revisions to the Personnel System

As a part of our Denka100 human resource strategies, we are upgrading our personnel system. The new system adopted at Denka (parent company only) has made it possible for employees to change their job category between specialists, engineers and general staff. We have also incorporated the “Engineers’ Promotion Plan” aimed at promoting engineers who proactively strive to acquire more advanced skills and techniques, as well as the in-house “Meister Certification System” for outstanding employees to encourage them to serve as role models for their junior colleagues. From April 2015, age limitations and other conditions that determine eligibility for these programs have been relaxed. Furthermore, we have upgraded plans aimed at assisting young employees and women with their career development, such as childcare leave and reinstatement programs.

► Work-Life Balance

Focusing on helping people strike work-life balance, we are promoting healthy working styles so that employees can freely develop their full potential while achieving success in various aspects of their lives. To that end, two key initiatives are under way at Denka (non-consolidated basis) to reduce excessive overtime and encourage the full use of annual paid leave.

To reduce overtime, we are streamlining day to day operations through such initiatives as GCP activities. Moreover, Wednesday is a “No Overtime Day” for the Head Office along with all branches and sales offices. Business units whose staff are found to be working excessive overtime are subject to on-site assessments. By doing so, we make sure that appropriate working hour management practices are in place.

We have raised the number of days of annual paid leave granted to new recruits and employees who have served at the Company for fewer than four years. In addition, annual refreshment leave (one day) is available to employees at any time, from the beginning of fiscal 2014 onward, with the aim of making it easier to take consecutive days of leave.

Other initiatives include upgrading childcare and nursing care leave plans and facilitating the use of such plans, as we recognize that employers’ assistance to those who struggle with child rearing or nursing care issues ultimately helps to resolve the challenges confronting society.

Status of Work-Life Balance (non-consolidated basis)

	Fiscal 2012	Fiscal 2013	Fiscal 2014
Total working hours	1,928	1,925	1,931
Overtime hours	92	91	100
Average number of days of paid leave utilized	9.2	9.2	9.05
Ratio of annual paid leave utilized	50%	49%	48%
Number of employees who took childcare leave (Of which, male employees)	3 (0)	4 (0)	6 (0)
Number of employees who took nursing care leave	0	1	1
Number of employees who took volunteer activity leave	2	0	0

Denka’s Three-Year Action Plans

Three-Year Action Plans in line with national legislation to support raising children (non-consolidated basis; launched in April 1, 2014)

- 1) Raise the average number of days of annual paid leave utilized per employee to 12 or greater
- 2) Reduce overall working hours by improving the efficiency of operations
- 3) Help young people enhance their understanding of working life and seek stable employment through the provision of internship programs and plant tours; assist college or university students who have grown up in vicinity of the Company’s domestic plants in their pursuit of higher education through the provision of scholarship
- 4) Provide educational support by hosting plant tours and experimental science classes

► Mental Health Promotion Plan

Given the recent rise in the number of people who suffer mental illness, Denka has made addressing mental health issues a critical management task. In addition to mental health seminars provided at each production site, in fiscal 2013 we established the Mental Health Promotion Plan to launch comprehensive countermeasures encompassing Head Office and each branch as well as the Denka Innovation Center.

The countermeasures include training focused on “self-care” and “group-care.” In line with this plan, we have launched a support structure run by in-house staff while setting up a 24-hour helpline run by a third party. Furthermore, we formulated a reinstatement program for those who are on long-term leave due to mental health problems. Thanks to these efforts, the number of employees who suffer mental health problems as of April 2015 decreased 4% compared with April 2013.

Number of Employees Who Participated in Mental Health Training in Fiscal 2014

Business Site	Number	
	Fiscal 2013	Fiscal 2014
Head Office (specialists)	316	132
Head Office (general staff)	94	–
Branches (five locations)	21	131
Innovation Center	35	133
Total	466	396

► Initiatives to Promote Diversity

Respecting the individuality and value system of each person, we are actively employing diverse human resources while helping them realize their full potential.

For example, the proportion of women hired as specialists in fiscal 2015 was 17%. We will continue to strive to raise this figure to 20%. Moreover, we revised our personnel system in April 2015 with the aim of assisting women with their career development. The revision allows women to work shorter hours until their children finish the third grade of elementary school (previously, this program was limited to the period preceding the child’s third birthday). Also, employees whose spouses are transferred by their employers are now allowed to apply for a change in work location so that they can continue in service at Denka. Furthermore, we have introduced a program to help reinstate employees who have been forced to leave Denka due to such private reasons as the need to provide nursing care, marriage, childbirth, child rearing and changes in spouses’ work locations. Specifically, this program allows personnel who were 35 or younger at the time of their resignation to rejoin Denka within three years of said resignation, providing they subscribed to the program before leaving. In principle, their wages remain unchanged from wages paid prior to resignation.

► Initiatives to Create a Globally Competitive Workforce

In line with the Denka100 management plan, we aim to achieve an overseas sales to net sales ratio of 50% or greater by the end of fiscal 2017. For this, securing and nurturing human resources with diverse value systems and responsiveness to various business settings is essential. Therefore, we proactively promote locally hired staff at overseas subsidiaries. As a result, our business sites in Singapore and China have managers and general managers appointed from among locals. At the same time, we are looking to foreign students as a source of competitive personnel and have hired two new recruits from this pool in April 2011, 2013 and 2014. In April 2015, we welcomed three foreign students from China. In addition, four externally recruited Chinese nationals have joined Denka in the last two years.

Since fiscal 2013, five new recruits hired in Singapore by Denka Chemical Holdings Asia Pacific Private Limited (DCHA) have been undergoing a two-year training program at business sites in Japan aimed at nurturing future manager candidates.

In autumn 2015, more participants will enter this program in line with plans calling for providing similar training opportunities to international employees. In these ways, we are continuing to facilitate the exchange of human resources among Group members and thereby nurturing future global leaders who can spearhead our overseas expansion strategies.



Singaporean nationals receiving managerial training at Denka’s Head Office

Status of Employees (non-consolidated basis) and Diversity Data

	Fiscal 2012	Fiscal 2013	Fiscal 2014	
Number of employees	2,832	2,873	2,934	
Gender	Male	2,630	2,660	2,718
	Female	202	213	216
Employment status	Permanent	2,031	2,032	2,152
	Temporary	801	841	782
Average age	39.6	39.8	39.7	
Average years of service	17.8	18	18	
New recruits	122	103	100	
Specialists (hired from new graduates)	Male	38	34	36
	Female	3	11	9
Female managers	1	1	1	
Retiree reemployment rate	88	88	89	
Ratio of people with disabilities	2.10	2.24	2.14	
Resignees	35	30	40	
Number of people who resigned within three years of recruitment	14	4	3	

► Employing People with Disabilities

We are creating a workplace in which people with disabilities can work with confidence and realize their full potential. The HR Department, which provides systematic support for employees with disabilities, is directly involved in selecting assignments for such employees and engages in consultation with their supervisors as needed. In fiscal 2014, the percentage of employees with disabilities stood at 2.14% (non-consolidated basis), exceeding the statutory quota.

	Fiscal 2012	Fiscal 2013	Fiscal 2014
The Ratio of People with Disabilities in the Total Workforce	2.10%	2.24%	2.14%

► Initiatives with Labor Unions

Denka holds periodic conferences, negotiations and other gatherings with the Denka Labor Union and Denka Head Office Employees’ Union, maintaining favorable and mutual relationships of trust. In particular, we hold quarterly meetings to review working conditions and to exchange various views on this matter.

Message from the General Manager

Denka is undergoing a major change with a new name and corporate logo and slogan. We have also established the Denka Principles in order to clarify the Group’s core values. What I believe will prove the true game changer, though, will be the contributions of individual employees faithfully pursuing their day-to-day duties. The HR Department will strive to help all realize their full potential while creating a corporate culture that maximizes organizational strength and performance.

Terumitsu Nakano
General Manager, HR Dept.



Working with the Supply Chain

We Are Implementing Our CSR Procurement Policies and Guidelines in Cooperation with the Entire Supply Chain.

CSR Procurement

The Denka Group recognizes that all of its suppliers are essential partners in its pursuit of initiatives aimed at fulfilling its social responsibilities. In line with this recognition, the Group works hand in hand with its supply chain to promote CSR procurement while clarifying its approach and standards through the CSR Procurement Policies and CSR Procurement Guidelines that it formulated based on the Denka Group Guidelines. In fiscal 2014, we sent out questionnaires with regard to our CSR Procurement Guidelines to key suppliers representing 70% of our raw material supply chain in terms of transaction value. As of June 2015, we had heard back from half those queried, and all respondents expressed approval of Denka's CSR Procurement Policies and Guidelines.

Going forward, we will conduct a detailed analysis of the survey results while engaging in dialogue with those who have yet to reply in order to identify upcoming challenges and thus determine countermeasures to be implemented. In these ways, we will step up CSR activities by encouraging the involvement of suppliers in CSR procurement.

Message from the General Manager

We are striving to enhance our corporate value through CSR activities with the aim of creating a company capable of growing over the next 100 years. As part of these activities, we asked our suppliers to fill in questionnaires with regard to our CSR Procurement Guidelines, thereby reconfirming the importance of communication with our business partners. Looking ahead, we will work hand in hand with them to resolve challenges while maintaining favorable partnerships and enhancing relationships of trust.



Masataka Yoshitomi
General Manager,
Purchasing Dept.

Response to the Conflict Minerals Issue

In the United States, listed companies are obliged to report on the status of the use of conflict minerals to the Securities and Exchange Commission (SEC) in accordance with the Dodd-Frank Wall Street Reform and Consumer Protection Act enacted in July 2010 and rules issued by the SEC in August 2012. Although Denka is not subject to this legislation, the Company undertakes tracking surveys when requested by customers to make sure that its products are conflict mineral free.

Our Policies on Quality Management

In fiscal 2014, we implemented ongoing quality improvement activities in line with the following Companywide Quality Policies.

1. Improve quality assurance levels Companywide
2. Enhance technologies to ensure built-in quality
3. Strengthen compliance with laws and regulations and enhance customer satisfaction
4. Raise awareness of employees engaged in manufacturing
5. Facilitate the adoption of quality control technologies and methods at each production site

Although we experienced no major quality problems such as those related to product liability, the number of complaints increased slightly (fiscal 2013: 465 cases; fiscal 2014: 496 cases). In May 2014, we introduced a system for handling customer complaints on a Companywide basis, thereby speeding up the registration and analysis of complaints and ensuring the swift implementation of countermeasures. We also began evaluating the impact of each complaint in terms of financial loss.

In the face of a global trend toward the tightening of regulations on chemical substances, we are developing a more robust database of documents related to the registration and management of chemicals, including Safety Data Sheets (SDSs). By doing so, we strive to ensure strict compliance with laws and regulations.

Life Cycle Assessment (LCA) Initiative

With an eye to securing the sustainability of its corporate activities and society as a whole, Denka is promoting LCA initiatives aimed at saving energy and reducing CO₂ emissions. These initiatives also help us identify risk and business opportunities.

In addition to calculating the emissions of greenhouse gases (GHGs) directly attributable our products' lifecycles, we began calculating Scope 3 (indirect) emissions, with the CDP task force.

Main Initiatives:

- 1 Prepared a list of environment-friendly products that directly or indirectly contribute to environmental load reduction throughout their lifecycles and calculated the volume of GHG emissions that can be curbed through the use of these products
- 2 Participated in the carbon-Life Cycle Analysis (c-LCA) Committee hosted by the JCIA and cooperated in the preparation of Guidelines for Calculating and Reporting the Reduction in GHG Emissions from the Value Chain (Supplement), a forward-looking project based on the comparative analysis of GHG emissions from various components of the chemical industry's value chain
- 3 Providing LCA-related information in response to customers' requests
- 4 Calculated Scope 3 emission volume

Engaging with Local Communities

To Maintain the Trust of Society, We Will Contribute to Local Communities While Supporting the Upbringing of Future Generations.

Our Social Contribution Activities

In line with Article 9 of the Denka Group Guidelines stating "We will contribute to society as a good corporate citizen," Denka recognizes that implementing local contribution and cultural activities in collaboration with other community members is essential to fulfilling its social responsibilities.

Based on this recognition, our key social contribution initiatives include hosting experimental chemical classes and plant tours (academics and education); undertaking cleanup and greenery maintenance activities in neighboring areas (environmental conservation); supporting local festivals and art and sports events (culture, art and sports); and dispatching volunteers to aid in reconstruction efforts in disaster-stricken areas (humanitarian aid).

Not only do we aim to contribute to society through these activities, we also consider them as key to facilitating the understanding of our operations among the general public and enhancing our relationship of trust with community members. Moreover, we believe that allowing employees to engage in self-motivated social contribution activities enables them to attain personal growth and gain a sense of accomplishment. We have therefore positioned these activities as opportunities to enhance the value of our human resources.

Revitalizing Local Communities by Promoting Sports Activities

Denka has been supporting a number of sports events held at the DENKA BIG SWAN STADIUM for the nearly two years since renaming this arena following the acquisition of naming rights in January 2014. It is the home stadium for ALBIREX NIIGATA, a professional football team. The stadium also provided a venue for the 99th Japan National Track & Field Championships, a nationwide track and field competition. In addition, having signed a uniform supplier agreement with the NIIGATA Albirex BB Rabbits, a female basketball team based in Niigata, Denka is proactively providing assistance as the Company expects the team to help drive the revitalization of local society. We will continue to promote sports activities to create a more vibrant community.



A tour group of ALBIREX NIIGATA supporters organized by Denka



Members of ALBIREX NIIGATA exchanging high fives with children

Hosting Experimental Chemical Classes

We hold a number of experimental chemical classes for children to provide them with hands-on experience of chemistry. We hope that, after attending such events, children will go on to share with their friends, parents and families the wonders and excitement of chemistry that they experienced at the classes. This is one way that we nurture interest in chemistry and gain people's confidence in our business operations.

Specifically, Denka participates in the Summer Holiday Chemical Experiment Show for Children sponsored by the "Dream Chemistry 21" committee. Moreover, each domestic plant and the Innovation Center host facility tours and other chemistry experiment shows to which they invite local children and students. These sites also provide on-demand lectures on chemistry at local elementary schools while taking part in community events that involve demonstrations of chemistry. In addition, the plants accept interns looking to gain hands-on vocational experience at production sites.

While supporting the upbringing of future generations, Denka staff often find themselves further motivated by the unreserved expressions on children's faces of wonder and excitement at seeing the possibility of chemistry.



Summer Holiday Chemical Experiment Show for Children

Ongoing Social Contribution through Volunteer Initiatives, Scholarship Programs, etc.

With the aim of supporting the reconstruction of areas affected by the Great East Japan Earthquake, many Denka employees have been participating in ongoing volunteer activities. As of August 2015, Denka had dispatched a total of 435 employees on 54 occasions to restore agriculture, fishery and other local industries in Minami Sanriku-cho.

Denka also helps college or university students who grew up in the vicinity of its domestic plants through the Denka Scholarship System, which was established on the occasion of the Company's 90th anniversary to provide students with rent assistance.

In addition, each production and business site is engaged in various social contribution activities, participating in local festivals and other community events, taking part in blood donation campaigns, cleaning up roads and ditches and maintaining the landscape around their premises.



The Fujimicho Town Association Summer festival (Ofuna Plant)

Engaging with Shareholders

While Enhancing Communication with Our Shareholders and Investors, We Strive to Reflect Their Opinions in Business Operations.

Denka's Policies on Shareholder Returns

Denka established its Policy on Shareholder Returns based on a resolution at a Board of Directors meeting held on November 10, 2014, aiming to return profits yielded by initiatives executed under the Denka100 management plan to its shareholders. The Board simultaneously resolved on a budget for M&A and other strategic investments for further growth, with the goal of swiftly achieving an ROE of 10% or greater.

Policies on Shareholder Returns and Budget for Forward-Looking Investments

1. Policies on Shareholder Returns

Target total payout ratio*: 50%

* (Dividends paid + treasury stock purchased)/consolidated net income

2. Methods for Shareholder Returns

- ① Cash dividends: Maintain steady cash dividends, with a minimum payout ratio set at 30%
- ② Purchase of treasury stock: Flexibly purchase treasury stock in step with trends in stock prices and the market environment

3. Budget for Forward-Looking Strategic Investments

After paying out shareholder returns, Denka will appropriate funds from retained earnings as well as cash inflows to finance such investments. The total amount budgeted for is approximately ¥50 billion.

(Over the four years from fiscal 2014 to 2017)

4. Term

Four years ending with fiscal 2017, the target year of the Denka100 management plan

Results Briefings

Denka holds periodic results briefings for analysts and institutional investors, believing that maintaining a proactive approach to disclosing the latest corporate information to shareholders and investors can enhance their understanding of our business operations and growth strategies.

A results briefing for the fiscal year ended March 31, 2015, was held on May 12, 2015. During the briefing, we provided our fiscal 2014 financial results and performance forecasts for fiscal 2015. We furnished updates on our progress regarding the current growth strategies set forth in the Denka100 management plan and presented the new corporate logo and slogan and change in company name. We also gave a presentation on the status of our operations related to acetylene black, DENKA AN Plate and ALSINK.

Corporate Briefing for Individual Investors

On August 28, 2014, Denka held a corporate briefing for individual investors at Niigata Convention Center "TOKI MESSE" in Niigata City. The 12th of its kind, this briefing welcomed more than 100 attendees and provided them with Denka's corporate overview, an outline of its domestic and overseas business networks and a description of its flagship Omi Plant as well as of Denka Seiken Co., Ltd., a Group company specializing in the field of life science. We also explained the progress of the construction of the New Omigawa Power Plant and the status of other initiatives undertaken in line with the Denka100 management plan. In addition, we clarified our management stance on enhancing shareholder returns and capital efficiency while aggressively investing in the aforementioned initiatives for future growth.

At the venue, rapid diagnostic test kits produced by Denka Seiken were exhibited alongside training uniforms and official game balls used by ALBIREX NIIGATA. These exhibits drew investors' attention as they attested to our technological strengths as well as our relationship with the local community.

General Meeting of Shareholders

Denka's annual General Meeting of Shareholders provides a valuable opportunity for engaging in direct communication with shareholders. Accordingly, we work to give shareholders enough time to examine the reports and items up for vote. To this end, we post the notice of convocation for the General Meeting of Shareholders, prepared in Japanese and English in PDF format, on the Company's and the Tokyo Stock Exchange's websites before sending them out in print. We have also switched the size of the printed version of this notice from B6 (128 x 182 mm) to B5 (182 x 257 mm), with the aim of enhancing readability. In principle, the printed version is sent three weeks prior to the date of the meeting. Moreover, we try to schedule the meeting at the earliest possible date to avoid overlaps with similar meetings held by other companies, thereby making it easier for shareholders to attend. (June 20 in 2014 and June 19 in 2015)

At each meeting, we use narrated videos to supplement our explanations of reported items while maintaining exhibition booths to showcase our initiatives and products and gain greater recognition of our operations.

We have adopted a voting system that allows shareholders to use on-line voting via personal computers and cellular phones in addition to regular post. Denka also joined the Electronic Voting Platform for institutional investors run by the Tokyo Stock Exchange.



The 156th ordinary General Meeting of Shareholders

Third-Party Opinion



Tamio Yamaguchi

Director of Junkan Workers Club*

A Landmark Edition Highlighting Denka's Strategic Priority and Future-Oriented Business Approach

Just as the Global Reporting Initiative (GRI) Guidelines are periodically upgraded (now version 4), CSR reporting must evolve in step with changes in society and its requirements. This means that the reporting company should listen closely to what society and its stakeholders around the world are saying. I have provided a third-party opinion for Denka's CSR reports since the fiscal 2011 edition and appreciate the Company's steady efforts to improve its reporting. In fact, in my two meetings with the people involved in CSR reporting, which included several executives and 25 employees, I could see that they did their best to communicate societal concerns within the organization as well as my recommendations to the Company's frontline staff.

The *Denka Group CSR Report 2015* is a landmark edition celebrating the centennial of the Company's founding. Typically, businesses highlight past accomplishments in such publications—a dated approach that does not reflect today's growing need for CSR reporting focused on strategic priorities and forward-looking initiatives. It is therefore impressive that in this report Denka's emphasis is on its growth strategies for the next 100 years, the newly established Denka Principles and the corporate slogan as well as other future-oriented initiatives, while introducing its history of hydroelectric power generation concisely in just two pages. I believe that the overall content of this report draws the reader's attention to Denka's future growth potential rather than its past.

There are two more features that will inspire expectations of future growth. The first of these is an impressive series of articles regarding Denka's business models and value creation flows. Generally, a "business model" is a system whereby input (capital) is converted into output through business activities aimed at achieving strategic targets and creating value. Often, it is hard to clearly describe a given business model and I have read many reports with vague and abstractly defined business models. In this report, however, Denka has been able to concisely describe the various complex business models the Group employs and to

present sources of value and created value in a well-organized manner. A great deal of discussion and thought went into preparing these articles and I believe that this report could serve as a best practice case for the presentation of business models.

The second factor that makes this report stand out is the inspiring explanation of "Creating Shared Value" (CSV). Denka has positioned businesses aimed at helping to resolve social issues as a growth driver. Accordingly, this report provides clear-cut examples of such social issues, expected technological innovation and proposed technological solutions, with each division concisely presenting its growth drivers.

Denka seems to be well aware of the fact that stakeholders' expectations could easily be compromised by only a couple of accidents. In this edition, the president clarified his commitment to taking a lead in safety-oriented activities while chairing the Safety Measures Headquarters. Moreover, management's strong determination to create a safety-oriented corporate culture is evident in the report's look at ongoing initiatives related to the two major accidents in fiscal 2013, a comment from an outside expert who provided third-party evaluation of these initiatives and the newly formulated Basic Policy for Workplace Safety, Health, Security and Disaster Prevention.

I was also impressed with the decisive shift that Denka has made toward global expansion. I've seen many companies express their commitment to achieving "true globalization" while avoiding the negative corollary effects. Despite their efforts, however, their pursuit of "true" globalization often leaves the definition of the term unclear. As it pursues "true globalization," I expect Denka will establish a robust structure for promoting CSR initiatives that are on-trend with globalization, setting policies for local activities based on that structure and ensuring that every business unit throughout the Group embraces these policies as well as globally recognized "soft laws." In addition to this, I recommend Denka to become a signatory to such international initiatives as the UN Global Compact and to take a role in setting forth global rules for the promotion of environment-friendly products and technologies—fields in which the Company itself boasts a broad lineup.

Working to minimize the negative impact of their operations on the environment and society and to help resolve social issues are key to businesses fulfilling their social responsibilities. Along with these initiatives, I believe it is also essential that businesses move proactively to effect change in society and contribute to the formation of international practices aimed at ensuring sustainability. As Denka is now taking a step forward toward the next 100 years in 2015, I strongly believe that it is time for the Company to begin with such actions.

* An NPO dedicated to fostering the harmonious coexistence of society and natural ecosystems through research conducted from a global perspective. It studies and spearheads local community efforts for creating a recycling-oriented society joining citizens, businesses and governments, presenting recommendations through CSR workshops and other means.
URL: <http://junkanken.com/> (Japanese only)

Editorial Afterword

First of all, we would like to express our gratitude to the readers of the *Denka Group CSR Report 2015*. In this edition, we highlighted the history of our hydroelectric power generation in the Special Feature section to celebrate the milestone year of our centennial while focusing on each Denka100 initiative aimed at securing sustainable growth over the next 100 years. We have also reported on Companywide initiatives aimed at establishing a safety-oriented corporate culture that we launched based on lessons learned from two major accidents in 2013.

We would also like to thank Mr. Yamaguchi, who has provided us with a number of valuable suggestions, including those related to the creation of a structure for promoting CSR initiatives in tune with globalization as well as product development aimed at contributing to the environment and society. To create an even better report for fiscal 2015, we will implement comprehensive review on Groupwide CSR activities while enhancing the content of each activity.

We would like to ask our readers to give us their frank opinions and comments as we aspire to live up to expectations and trust of all of our stakeholders. Looking ahead, we sincerely ask for your guidance and encouragement.



Noriyuki Shimizu
General Manager,
CSR & Corporate
Communications Dept.