

# **DIC REPORT 2014**

The DIC Group's Corporate Profile & Sustainability Report



**DIC** Corporation

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#### Sustainability Report

Goals and Achievements of Major Sustainability Initiatives
Goals and Achievements of Major Responsible Care Initiatives

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#### **About this Report**

Effective from fiscal year 2014, the DIC Group has combined its corporate profile and its sustainability report, previously independent documents, with the aim of presenting a clear, easy-to-understand picture of the Group and its sustainability initiatives.

#### Links with the DIC Website

The WEB mark indicates that more detailed information and/or data can be found on the indicated page of the DIC website. DIC website WEB http://www.dic-global.com/en

#### **Scope of Reporting**

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In principle, this report provides information on DIC Corporation and consolidated DIC Group companies in Japan and overseas. For information on the scope of reporting for ESH-related initiatives, please visit the pertinent page of the DIC website.

WEB http://www.dic-global/en/csr/pdf/dic\_csr\_scope\_ja\_2014.pdf

#### **Reporting Period**

This report provides information on domestic Group companies for fiscal year 2013 (April 1-December 31, 2013), a transitional irregular nine-month period, and on overseas Group companies for 2013 (January 1-December 31, 2013).

ESH information is for domestic and overseas Group companies for 2013 (January 1–December 31, 2013). Date of Publication

June 2014 (The next report is scheduled for publication in June 2015.)

#### **Guidelines Referenced**

Guidelines referenced in the preparation of this report were ISO 26000, the International Organization for Standardization's standard for social responsibility, released in 2010, and Japan's Responsible Care Code.

## **Color & Comfort by Chemistry**

Established in 1908 as a manufacturer of printing inks, DIC has expanded its mainstay organic pigments and synthetic resins businesses while at the same time cultivating world-class related core technologies. Since then, DIC has leveraged these technologies to build a broad portfolio encompassing materials and finished products. This has enabled the Company to respond to market needs by providing customers in the automotive, electronics, food packaging, housing and other industries with solutions that bring "color" and "comfort" to people's lives.

Looking ahead, DIC-today a multinational corporate group with operations in more than 60 countries and territories-will redouble its efforts to contribute to environmental protection and to the realization of a safe and sustainable society.

#### **DIC Group Communications Tools**

The DIC Group uses a variety of tools to promote communication with its many stakeholders to encourage greater awareness of the Group's activities. More detailed sustainability-related information and data can be found on the DIC website.

#### **Reports on activities**

**DIC Report** 



Combined report on sustainability initiatives and corporate profile (published annually) (Printed and PDF-form publications)



Report on operations and financial condition (PDF-form publication)

#### **Real-time information DIC Website**



WEB http://www.dic-global.com/en Umbrella website providing information to the global public about the DIC Group and reporting on its various activities; updated as necessary

## The DIC Group: A Global Powerhouse

Corporate data is as of December 31, 2013. Net sales and operating income results are consolidated results for fiscal year 2013.

## **Corporate Data**

Registered name: Corporate headquarters:

Date of foundation:

Paid-in capital:

Number of

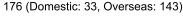
Date of incorporation:

Number of employees:

#### **DIC** Corporation

WATERRAS TOWER, 101, Kanda Awajicho 2-chome, Chiyoda-ku, Tokyo 101-0063, Japan February 15, 1908 March 15, 1937 ¥91.2 billion 20,034 (Nonconsolidated: 3,484)

subsidiaries and affiliates: **Net Sales** (Billions of yen)



(Billions of ven)



40 30 20 10 0 '09 '10 '13 (FY) 12

\* The consolidated results for fiscal year 2013 comprise the accounts for the nine months ended December 31 2013, of DIC and its domestic subsidiaries but one and the 12 months ended December 31, 2013, of its overseas subsidiaries and one domestic subsidiary.

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## **Reportable Segments**



Printing Inks

Offset inks, gravure inks, flexo inks, can coatings, news inks, packaging adhesives, presensitised (PS) plates, printing supplies

Operating income ...... ¥18.4 billion



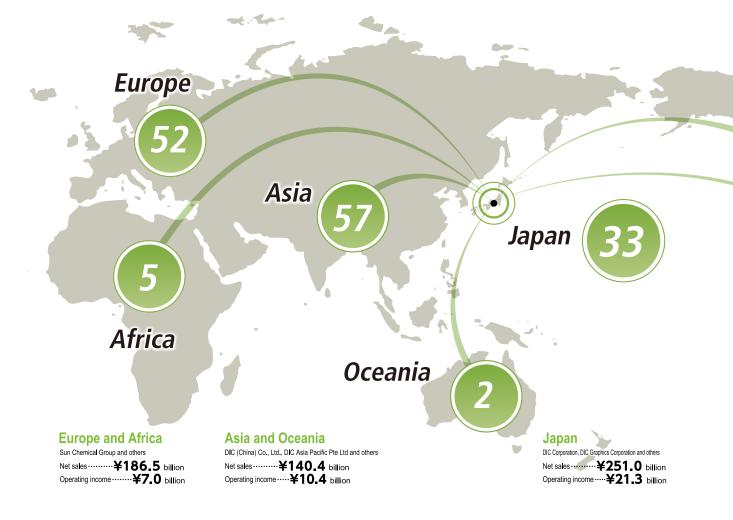
### Fine Chemicals

Organic pigments for printing inks, organic pigments for coatings and plastics, organic pigments for color filters, thin-film transistor (TFT) liquid crystals (LCs), supertwisted nematic (STN) LCs, alkylphenols, metal carboxylates, sulphur chemicals (lubricant additives)

Operating income ...... ¥11.4 billion

### **Global Network**

DIC has 176 subsidiaries in 61 countries and territories around the world.



The DIC Group has leveraged its distinctive organic pigments and synthetic resins, essential to the manufacture of printing inks, to build an extensive business portfolio.



#### **Polymers**

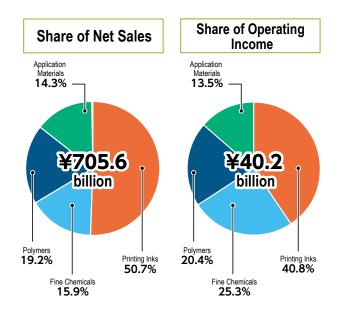
Synthetic resins for inks and coatings, molded products, adhesives and textiles (polyurethane, epoxy, polystyrene, polyester, acrylic and phenolic resins, plasticizers), papermaking chemicals

Net sales ····································	
Operating income	

#### **Application Materials**

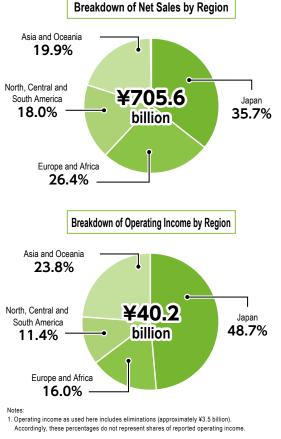
Ultraviolet (UV)-curable coatings and bonding adhesives for optical discs, jet inks, plastic colorants, polyphenylene sulfide (PPS) compounds, high-performance compounds, coextruded multilayer films, decorative boards, industrial adhesive tapes, specialty magnetic foils, hollow-fiber membranes and modules

Net sales ············¥105.2 billion Operating income ·········¥6.1 billion



Note: The aggregates of net sales and operating income by region on page 3 and below do not correspond to reported net sales and operating income, as the former includes income not attributable to reportable segments and eliminations (¥4.3 billion).





 The consolidated results for fiscal year 2013 comprise the accounts for the nine months ended December 31, 2013, of DIC and its domestic subsidiaries but one and the 12 months ended December 31, 2013, of its overseas subsidiaries and one domestic subsidiary.

## A Message from the President



In line with the slogan of DIC105—"Step Beyond" we will concentrate our allocation of management resources in business domains with the aim of ensuring sustainable growth.

### The DIC Group in Fiscal Year 2013

In April 2013, we embarked on a new medium-term management plan, DIC105, which will guide our efforts through fiscal year 2015. This plan is the first phase of a longer-term initiative that sets clear, concrete objectives for fiscal year 2018.

With signs of a gradual global economic recovery evident in 2013, Japanese government economic policies—dubbed "Abenomics" after the current prime minister, Shinzo Abecontinued to support a weak yen and strong share prices. Against this backdrop, results in core industries, notably automobiles, civil engineering and construction, were firm. We also saw a significant improvement in operating results, with operating income rising to ¥40.2 billion, Our operating margin reached a record-high 5.7%, underscoring the effectiveness of restructuring initiatives and the global expansion of our operations. On the balance sheet, our debt-to-capital ratio<sup>\*1</sup> declined to 57.7%, as we achieved our DIC105 target for fiscal year 2015 (58%) a full two years ahead of schedule.



Ceremony to mark the opening of DIC's new printing inks mother plant in the PRC (May 2013)

Visit to subsidiary Earthrise Nutritionals, LLC., in the United States (September 2013)

While many challenges remain, I think it is fair to say that we succeeded in laying a solid foundation for the implementation of measures that will ensure we meet all the targets we have set under DIC105.

### Implementing the Central Strategy of **Our Medium-Term Management Plan**

We have positioned the expansion of businesses that will drive growth in the years ahead as the central strategy of DIC105. Accordingly, we are promoting bold, global initiatives to grow such businesses.

One business that will drive growth going forward is TFT-LCs\*2. Demand for TFT LCs, currently the dominant format used in liquid crystal display (LCD) televisions, continues to expand rapidly in the People's Republic of China (PRC). In addition to expanding the scope of our TFT LCs business, we are also in the process of building a new production facility in the PRC, a move that will further increase sales. In the area of pigments for color filters, another such business, we have expanded our product range beyond our highly rated green pigments, modifying technologies to facilitate the production of blue pigments for color filters that deliver superior brightness and contrast. In PPS products, a third growth-driving business, we are working to expand our global production capacity worldwide. We will also press forward with assertive efforts to further bolster sales of these products, including localizing our production of PPS compounds.

In these and all of our businesses, our success depends on our ability to build a strong corporate structure that enables us to compete in global markets. I will make every effort to enhance awareness of the importance of further cementing our position as a leading global player and of reinforcing our competitiveness across the DIC Group.

## Taking DIC105 to the Next Stage

To facilitate the concentration of our allocation of management resources in key areas, we are also advancing decisive restructuring initiatives. Of note, we have completed a roadmap for optimizing our printing inks businesses in North America and Europe and are steadily implementing measures delineated therein. These include reengineering our publishing inks business by taking necessary steps-including closing plants-to streamline production configurations and significantly increase operating rates for mother plants. We expect such initiatives to begin contributing to income in fiscal year 2015.

Another focus of DIC105 is the creation of next-generation businesses. We will continue to conduct R&D in line with themes of importance to the sophisticated, informationoriented society of the future, including materials for printed electronics\*3, as well as to advance the development of hybrid chemicals\*4 by combining organic and inorganic materials to realize superior performance features.

### DIC's Approach to Sustainability

We launched our corporate social responsibility (CSR) program in fiscal year 2007, in line with "The DIC WAY"- an articulation of our basic management approach-and have promoted efforts that reflect our belief in the importance of fulfilling our responsibilities as a member of society through our business activities. Having acknowledged the need to pursue sustainable growth in a manner that takes into account the environment, ecosystems and socioeconomic issues, in January 2014 we changed the designation we use across our program from "CSR" to "sustainability."

We are committed to remaining an organization that contributes to sustainable development for society and the global environment, as well as ensures our own sustainability. To do so, we must ensure our ability to effectively manage risks, as well as to achieve unfaltering growth in global markets. We will approach this challenge with a long-term perspective, promoting consistent initiatives that reflect our fundamental philosophy of engaging in businesses that enable us to create value for society.

<sup>\*1</sup> Debt-to-capital ratio is calculated as interest-bearing debt / (interest-bearing debt + net assets).
\*2 For more information on DIC's TFT LCs, see page 12.

<sup>3</sup> A next-generation production process for electronic circuits that employs printing technologies, printed electronics continues to attract attention for, among others, its suitability to mass production, ability to reduce fabrication costs and solid environmental credentials.

<sup>4</sup> The term "hybrid chemicals" describes technological areas and related product groups that combine DIC's specialized basic technologies with inorganic materials, thereby realizing sophisticated and/or multiple performance capabilities.

### Sustainability: A Global Commitment

We have declared 10 DIC Group sustainability themes and theme-specific medium-term targets, in line with which we are promoting a variety of initiatives aimed at a broad range of issues, from resources to value creation.

As a manufacturer of fine chemicals, we have a particular responsibility toward issues related to operational safety and ESH. We work tirelessly to reinforce our safety infrastructure and conduct safety training programs for employees worldwide that are designed to heighten individuals' ability to recognize danger, thereby enhancing safety across our diverse range of production activities and creating a Groupwide culture of safety.

The issues that threaten the earth's natural environment are a global challenge. Mindful of the importance of ensuring we operate in a manner that is in harmony with the environment, we conduct stringent environmental assessments and work diligently to develop products that balance exceptional performance and consideration for the environment and to realize environment-friendly production processes, as well as to enhance our R&D configuration and marketing practices to better respond to the needs of society.

We also acknowledge that the globalization of our personnel will be crucial to supporting sustainable growth for the DIC

Group. Accordingly, we have resolutely shifted the emphasis of our efforts to optimize human resources from regional to global and will continue to focus on cultivating employees with the skills to compete on a global stage in a fast-changing business environment. To this end, we have created a comprehensive human resources database that provides access to a broader, deeper pool of talent and are promoting measures aimed at fostering a new generation of employees with leadership capabilities.

Through initiatives such as those I have outlined here, we remain committed to thriving in an increasingly complex and diverse global environment as a corporate entity deserving of the trust of our many stakeholders. In these and all our efforts, we look forward to our stakeholders' ongoing support and guidance.

Vala

Yoshiyuki Nakanishi Representative Director, President and CEO DIC Corporation

The DIC WAY

#### **Basic Management Approach**

In February 2008, DIC celebrated its centennial anniversary.

Taking advantage of the opportunity provided by this milestone, the Company changed its official name to "DIC Corporation" and introduced a new corporate symbol. Prior to embarking on its second century in business, DIC adopted "The DIC WAY," an articulation of its new management approach, for the entire DIC Group. The DIC WAY comprises three elements, namely, DIC's "management vision, "corporate values" and "principles of conduct." These three elements are supported by "The DIC SPIRIT."



#### MANAGEMENT VISION

Color & Comfort by Chemistry

#### **CORPORATE VALUES**

Through unceasing innovation, the DIC Group strives to create new value directed at sustainable development for its customers, society and the environment.

#### PRINCIPLES OF CONDUCT

- We shall hone our sensitivity to changes in society and be aware of our mission to always be ahead of the times.
- We pledge to incorporate the concepts of social and environmental sustainability into our corporate activities.
- We vow to strive constantly to hone "The DIC SPIRIT."
  We shall respect the autonomy and initiative of each individual employee
- in applying his or her talents to the pursuit of our values and the realization of our vision.

## From CSR to Sustainability

WEB http://www.dic-global.com/en/csr/

The DIC Group launched its corporate CSR program in fiscal year 2007. In line with The DIC WAY, DIC has identified fulfilling its responsibilities as a member of society through its business activities and contributing to the evolution of society as the cornerstones of CSR.

In recent years, the need to achieve sustainability in a manner that takes into account, among others, the environment, ecosystems and socioeconomic issues, including global warming and the depletion of natural resources, has gained increased recognition worldwide. The DIC Group has consistently promoted a program of initiatives that reflect its awareness of these and other key imperatives.

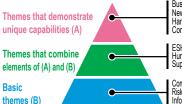
Having clarified its overall policy, effective from fiscal year 2014 the DIC Group changed the designation used across its program from "CSR" to "sustainability," which it feels is more appropriate for a globally active corporate entity.

The DIC Group remains dedicated to conducting its businesses while retaining a strong commitment to five key concepts: preserving safety and health, ensuring fair business practices and respect for human rights, maintaining harmony with the environment and advancing its protection, managing risks, and creating value for society through innovation. Through the unceasing implementation of initiatives aligned with these concepts, the Group will strive to remain an organization that contributes to sustainable development for society and the global environment, as well as ensures its own sustainability, thereby earning the trust of stakeholders.

#### Sustainability Framework and Themes

As a framework for implementing our sustainability program, the DIC Group has developed 10 sustainability themes and introduced a system whereby these are categorized as basic themes, themes that demonstrate unique capabilities and themes that combine elements of the previous two classifications. Each fiscal year, the Group formulates targets and activity plans for each of these themes.

Note: Details of themes and activities and achievements in fiscal year 2013 can be found in the "Report on Sustainability Themes" section of this report (pages 27–53).



Business models focused on social issues New technology development and value creation Harmony with the community and contributions to society Communication with stateholders

ESH and quality Human resources management Supply chain management

Compliance Risk management, including business continuity management (BCM) Information security

To guide its efforts to promote sustainability as an integral part of its business activities, the DIC Group formulates a basic sustainability policy, theme-specific medium-term targets and an annual activity plan. Accordingly, individual sales and technical administrative divisions, product divisions, sites and domestic and overseas DIC Group companies are charged with pursuing effective sustainability programs by formulating their own annual activity plan, ensuring the basic sustainability policy and targets permeate their organizations and labor forces, and linking sustainability activities to business targets.

#### System for Promoting Sustainability

The DIC Group's system for promoting sustainability centers on the Sustainability Committee, which answers directly to the president and CEO and is tasked with reporting on the status of sustainability themes, as well as with proposing policies and programs for advancing sustainability and deliberating related matters as a vital component of corporate management.



#### Ensuring DIC Remains a Globally Trusted Corporate Citizen with a Proud Reputation

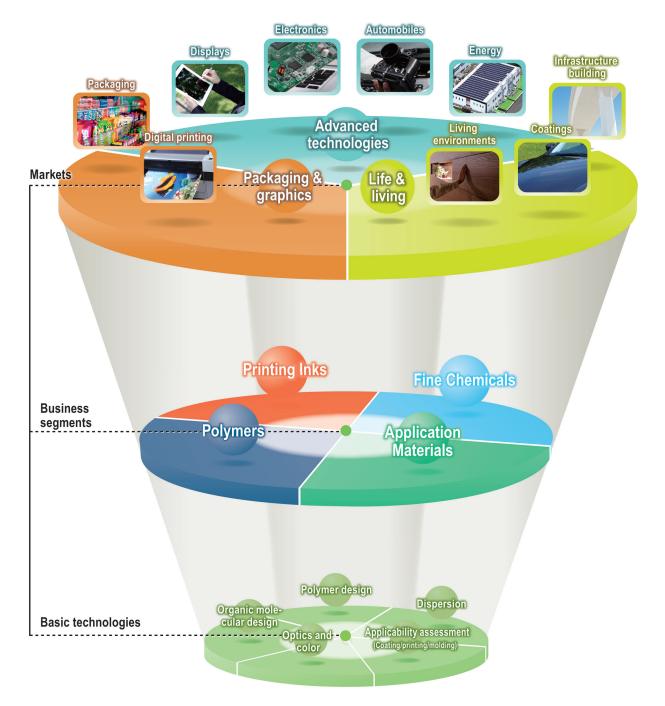
In December 2010, the DIC Group became a participant in the United Nations Global Compact (UNGC). The Group also operates in a manner that is consistent with ISO 26000, released in November 2010, which provides businesses and organizations with global guidelines for operating in a socially responsible manner.

## The DIC Group's Business Portfolio

## An Efficient Corporate Organization that Leverages DIC Group Strengths

### **Target Markets and Business Development**

The DIC Group has capitalized on its capabilities in organic pigments and synthetic resins, the principal material for printing inks, to build a broad portfolio. Today, the Group classifies its products in four business segments: Printing Inks, Fine Chemicals, Polymers and Application Materials. Through its Advanced Technology Sales Administration Div., Life & Living Sales Administrative Div. and Packaging & Graphics Sales Administrative Div.—three sales administrative divisions organized in line with three key market categories—and its affiliated companies, the DIC Group works to provide products that respond to the needs of society and its customers.



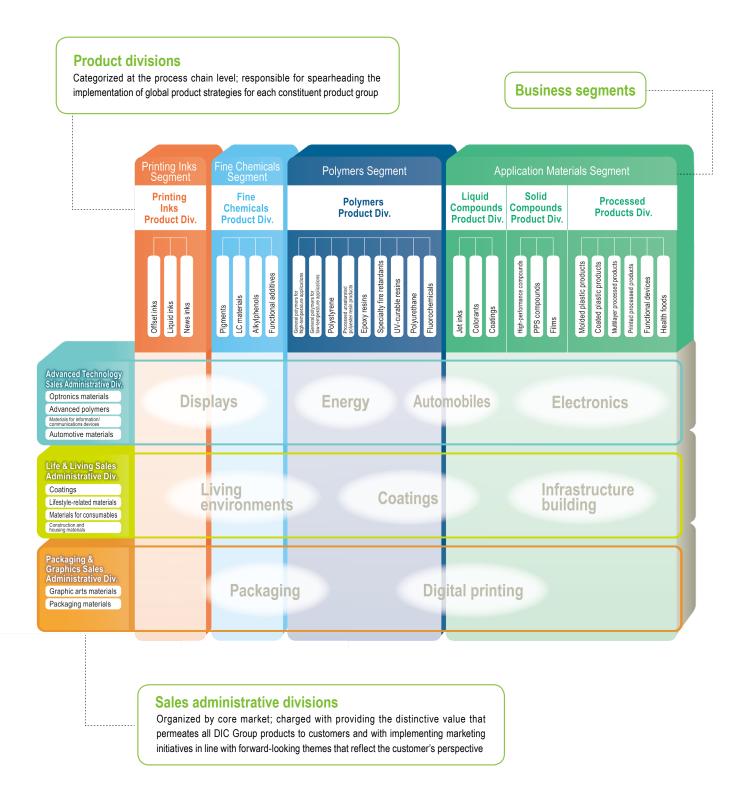
#### The DIC Group's Basic Technologies

The DIC Group strives constantly to contribute to a materially and spiritually affluent society through the development and provision of environment-friendly technologies and products. To this end, the Group is leveraging its basic technologies in the areas of optics and color, organic molecular design, polymer design, dispersion and applicability assessment to promote the development of products in key target markets.

## to Respond Swiftly and Accurately to Evolving Social Imperatives

### A Matrix-Like Corporate Organization that Leverages Comprehensive Capabilities

With the aim of facilitating concentrated efforts to grow core products, as well as a shift toward market-focused business development, the DIC Group has created a matrix-like corporate organization. This organization centers on seven product divisions, which are responsible for spearheading the implementation of global product strategies, and three market-oriented sales administrative divisions. The DIC Group is confident that this format will enhance agility—enabling it to respond swiftly to evolving social imperatives—and improve the internal sharing of information, thus underpinning efforts to leverage its comprehensive capabilities.



## **Printing Inks**

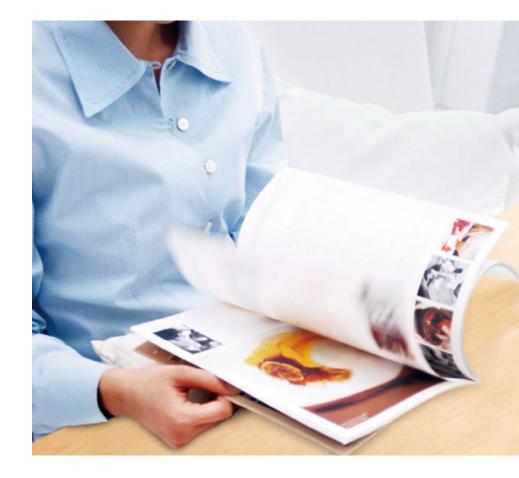
## A stable business since the start

This segment focuses on printing inks, DIC's mainstay business since its establishment. A global market leader, DIC boasts an extensive product portfolio ranging from publishing inks to inks and adhesives for packaging, enabling it to respond to the needs of customers worldwide.



#### **Printing inks**

Offset inks Gravure inks Flexo inks Can coatings News inks Packaging adhesives Printing supplies





#### Outstanding color reproduction, reduced energy consumption DAICURE HR series

#### (High-sensitivity UV-curable offset inks)

DAICURE HR offset inks contain no volatile organic compounds (VOCs) and facilitate high-speed drying, properties that help improve working environments and workability and that continue to support market expansion. Recent years have seen a sharp increase in the popularity of high-sensitivity UV-curable offset inks, which facilitate the use of low-watt or light-emitting diode (LED) lamps in UV curing systems, thereby contributing to the reduction of energy used. As well as suitability for use with low-power UV printers, DIC's innovative DAICURE HR high-sensitivity UV-curable offset inks deliver outstanding color reproduction, thus responding to the needs of customers seeking to switch from printing with oil-based inks to UV-curable printing.

### Ensuring safety for food and the environment

#### FINART series

#### (Gravure inks for food packaging)

In recent years, growing concern for food safety and increased awareness of environmental issues has hastened demand for the reduction or elimination of solvents in food packaging materials. With *FINART*, DIC has developed a series of gravure inks for food packaging that combines consideration for food safety and the environment with the superb image quality and suitability for high-speed printing demanded of gravure inks. In addition to conforming to the Japan Printing Ink Makers Association's voluntary regulations concerning the use of chemical substances in printing inks, these environment-friendly inks, which balance superior safety with excellent printability, also comply with food packaging regulations in Europe.



## **Fine Chemicals**

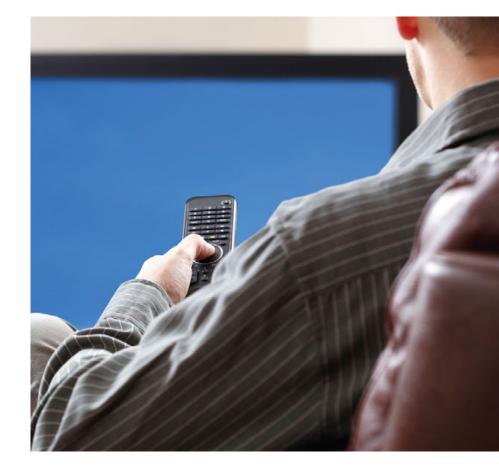
## Optronics materials and other high-value-added products

Products in this segment include a wide variety of materials indispensible to digital devices, including LC materials and organic pigments for color filters, which are expected to drive growth for DIC in the years ahead.



#### Fine chemicals

Organic pigments LC materials Alkylphenols Metal carboxylates Sulphur chemicals (lubricant additives)





## A marked increase in brightness and reduced LCD energy consumption G58 series

#### (Green pigments for color filters)

In addition to pigments for printing inks and coatings, DIC —the world's leading manufacturer of organic pigments in terms of market share—produces high-performance pigments for color filters used in LCDs. In manufacturing its G58 series of green pigments for color filters, DIC defied conventional wisdom by using zinc, rather than copper, as the central metal in the chemical composition, thereby achieving a marked increase in brightness.

The highest-grade product in the G58 series, FASTOGEN GREEN A310, is particularly noted for its exceptional brightness and contrast. FASTOGEN GREEN A310 has been adopted widely for use in LCDs with LED backlights—the dominant format for LCDs used in televisions and smartphones—contributing to improved picture quality and reduced energy consumption.

### Responding to the evolution of LCDs

#### TFT LCs

TFT LCs demand sophisticated expertise in molecular design, as well as advanced technologies for synthesis, mixing and the removal of minute impurities. DIC is one of only a few companies in the world capable of manufacturing TFT LCs. The ability of DIC's TFT LCs to satisfy customers' needs for higher brightness, faster response times and greater long-term reliability is evidenced by the fact that they have been adopted for use by LCD manufacturers worldwide. DIC continues to see sales of these products expand, particularly in the PRC and elsewhere in Asia. In addition to responding to customer needs arising from demand for larger LCD television screens and higher picture quality, DIC is promoting the production of TFT LCs for use in smartphone and tablet computer displays.



## **Polymers**

#### DIC's second core business

Capitalizing on DIC's world-class resin engineering capabilities, this segment provides synthetic resins and resin-related products to a wide array of industries.



#### Polymers

Alkyd resins Polyester resins Unsaturated polyester resins Plasticizers Waterborne resins Acrylic resins Methacrylate resins Amino resins Phenolic resins Polystyrene Processed sheet molding compounds (SMCs) Epoxy resins UV-curable resins Polyurethane resins Fluorochemicals





#### Surface protection for a wide variety of applications UNIDIC series (UV-curable hard coat materials)

The UNIDIC series comprises UV-curable resins that leverage DIC's distinctive resin engineering capabilities to satisfy diverse needs in terms of hardness, flexibility, viscosity, refractive index and other properties. Applications for these products are wide-ranging and include protective coatings for optical films, touch screens and other components for electronics equipment. DIC has established a broad lineup of hard coat materials that respond to customer needs not only for substrate surface protection but also for fingerprint resistance and flexibility, among others.

DIC is also promoting its hard coat materials for a variety of new applications, including flexible displays.

#### Exceptional heat resistance facilitates use in precision instruments EPICLON series

#### (Epoxy resins for electronics substrates)

Epoxy resins are UV-curable synthetic resins that cure when combined with curing agents, achieving exceptional moldability, heat resistance, electrical insulating properties and adhesive properties. These resins are used by manufacturers of electronics substrates and in a broad range of other industries.

As Japan's largest manufacturer of epoxy resins, DIC supplies the *EPICLON* series of environment-friendly, high-performance epoxy resins, which combine outstanding heat and flame resistance. Applications for *EPICLON* epoxy resins are diverse and include smartphones and computers.



## **Application Materials**

## Key applications of basic technologies

This segment encompasses a diverse range of applied products, including jet inks, engineering plastics and industrial adhesive tapes, which are made possible by the integration of DIC's synthesis, dispersion, coating and molding technologies.



#### Liquid compounds

Jet inks Fiber and textile colorants Coatings for building materials UV-curable coatings and bonding adhesives for optical discs High-performance adhesive materials UV- and electron beam (EB)-curable coatings

#### Solid compounds

PPS compounds High-performance compounds Plastic colorants High-performance optical materials Coextruded multilayer films

#### **Processed products**

Plastic pallets and containers Industrial adhesive tapes Label stock for printing Stickers and labels Magnetic tape and coated sheets Decorative boards and interior housing products Decorative systems Decorative interior sheets Hollow-fiber membranes and modules Health foods



#### Responding to the rapid evolution of smartphones DAITAC WS#8402 series

## (Double-sided adhesive tape for waterproof mobile communications devices)

The DAITAC WS#8402 series, one of the first series of waterproof tapes to be developed and marketed for waterproof smartphone construction, qualifies for IPX7, an international standard for protection against water ingress, earning it an unrivaled position in this market. The thin foam substrate of DAITAC WS#8402 series' tapes is soft, with a fine closed pore structure similar to that of a sponge. The substrate and the adhesive layer form a single tape that adheres tightly regardless of minute surface irregularities, thereby preventing water from penetrating. DIC continues to promote the development of adhesive tapes and other products in response to the trend toward lighter and more sophisticated mobile communications devices.

## Contributing to the realization of lighter, more fuel-efficient vehicles

#### DIC.PPS series (PPS compounds)

PPS polymer is an engineering plastic that boasts high resistance to heat—it has a melting point of approximately 280°C—and chemical substances. In addition to delivering outstanding heat and chemical resistance, PPS compounds in the *DIC.PPS* series maintain excellent rigidity, strength and electrical insulating properties, are lighter than iron and can be molded into more complex shapes, as a result of which these compounds have found application in components for hybrid, electric and other environment-friendly vehicles as a lighter, high-performance alternative to metal materials. As the world's leading manufacturer of PPS compounds in terms of market share, DIC enjoys a solid global presence, with bases in Asia, North America and Europe.



### **Special Feature**

# **Creating New Value that Responds to Evolving Social Imperatives**



While increasingly convenient and comfortable, our lives also face complex and diverse challenges. The DIC Group is leveraging its technologies to address these issues, delivering new value to help create a sustainable society.

### **Ceranate**<sup>®</sup> Hybrid Resin for Coatings

Shielding houses and other structures from UV rays and air pollution



#### **Social Imperative**

#### Promote market acceptance of a coating that resists pollution and reduces operator workloads

Coatings for housing, public structures, iron bridges, roads, automobiles and other objects must provide protection against rain and UV rays, as well as oily or acidic particulates from vehicle and factory emissions. Coatings made with organic solvents contain VOCs, so there is a risk of damage to the health of operators. Many emerging economies are experiencing vigorous construction demand, but have yet to address air pollution issues.

Contamination is a particular concern in these nations, which require coatings that offer superior resistance to weather, pollutants and wear.

#### **DIC's Response**



#### Develop stain-resistant Ceranate® aqueous resin

One problem with common fluorinated resin coatings is that although they are impervious to water and UV rays, their high affinity with oil results in stains from car and factory emissions. In 2008, DIC developed Ceranate®, a waterborne hybrid acrylic-polysiloxane (organic-inorganic) resin that uses nanotechnology to control dispersion. Hybrid molecules fuse together with the evaporation of moisture to form an exceptionally durable coating film that boasts not only superior gloss retention but also excellent resistance to oily

Aging

3Rs

stains and a self-cleaning capability whereby it uses rainwater to wash off dirt. As an aqueous resin, Ceranate® requires no organic solvents, thus reducing the health risks to operators.



Self-cleaning capability ensures excellent stain resistance



#### This is an optimal coating for the environmental and structural needs of emerging economies.

>

Hybrid organic-inorganic molecules were made possible by DIC's high-precision molecular design and nanoparticle dispersion technologies. Construction is still booming in many emerging economies, which suffer from worsening air pollution, making Ceranate® a choice that delivers true value. It is worth noting that there is a theory that urban appearances affect social order. We are promoting Ceranate® by highlighting its diverse benefits, including its contribution to aesthetic appearances, in emerging economies.



DIC booth at Painted India 201

Human

**Rights** 

Safetv/

Reliability

Manager of Overseas Technical Marketing, Life & Living Marketing Dept., Life & Living Sales Administrative Div. Atsushi Miyagaki



**Social Imperative** 

# Hybranch<sup>®</sup> Hyperbranched Polystyrene

## Enhancing the environmental performance of food containers, electrical appliance components and insulating materials



#### Social Imperative

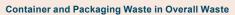
#### Provide superior resins that help reduce use of resources and energy in and increase the recyclability of containers

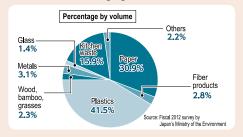
Polystyrene and clear plastic containers that keep food products fresh are essential to food sanitation, preventing contamination during transportation and storage and the deterioration of quality due to changes in temperature and humidity. Plastic containers are also light

and strong, thus consuming little energy during transportation, and in Japan the materials therein can be recycled and reused in various products in line with the Containers and Packaging Recycling Act.

Nonetheless, the plastics are made with petroleum and a considerable amount of energy is used in their production. Moreover, plastic containers account for a significant volume of household container and packaging waste.

From the perspective of helping to prevent global warming and resource depletion, the development and promotion of more resource-efficient materials is a crucial challenge.

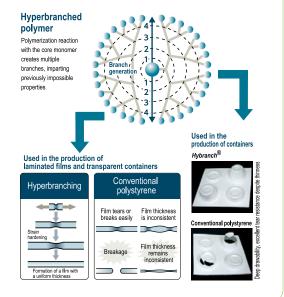




#### **DIC's Response**

#### Develop revolutionary thin polystyrene that resists tears and breaks

In 2006, DIC succeeded in developing a revolutionary polymer for which it became the first in the world to establish a mass production technique, called hyperbranching. This technique takes performance to new heights by creating multiple branches, or small molecules, through a polymerization reaction with the core monomer. DIC has used this technique in the production of polystyrene-a popular material for containers and packaging-to achieve a material that is lighter and thinner, yet more resistant to breaks, than conventional polystyrene, and has greater tear resistance than conventional laminated films. Containers and films made with DIC's Hybranch® polystyrene are thus thinner and lighter, require less energy to produce thanks to lower rejection rates and can be molded at low temperatures. Other benefits include high recyclability and quality even after recycling. In addition to food containers, applications for Hybranch® polystyrene include refrigerator trays and housing insulation.



#### KEY PERSON of DIC

The establishment of an industrial technology is a deeply significant achievement. DIC's proprietary polymer design, mixing and polymerization technologies enabled us to overturn the accepted notion that the flowability of a polymer necessarily decreases as its molecular weight increases. I believe it is very significant that DIC was the first in

flowability of a polymer necessarily decreases as its molecular weight increases. I believe it is very significant that DIC was the first in the world to establish a viable industrial technology that facilitates stable mass production of a hyperbranched polystyrene. This was possible thanks to an environment that encourages close collaboration between basic and developmental research groups. Going forward, we intend to further strengthen the framework for in-house collaboration in development efforts.



Head Researcher, Polymer Technical Group 3, Polymer Technical Div. 1 Tsuyoshi Fukukita

Comfortable

Lifestyles



Resource Conservation CO2

Reduction





# Solar Cells

Materials for Solar Cells

### Seeking to extend the lives of solar cell modules

#### **Social Imperative**

## Enhance weatherability to encourage greater use of renewable energy

Degradation as a result of UV rays, heat, humidity, wind and rain lowers the generating efficiency and shortens the lifespan of solar cell modules<sup>\*1</sup>. Accordingly, enhancing the weatherability of these modules is a key challenge.

>

To encourage use of solar power, it is essential to safeguard modules' vital solar cells from natural damage and to extend replacement cycles, thereby enhancing resource efficiency and enabling users to swiftly recoup their investment. Another challenge is to lower the weight of solar cell modules, thereby reducing the burden on structures that have had solar cell modules installed.

#### **DIC's Response**

#### Leverage the outstanding weatherability of DIC adhesives to increase back sheet durability

Back sheets for solar cells, which provide protection against heat, UV rays and humidity, are made from three layers of film bonded together with an adhesive. However, generalpurpose adhesives weaken quickly after use, negatively affecting both the performance and lifespan of solar cell modules. DIC overcame this problem in 2009 by developing a highly weather-resistant adhesive that leverages its hydrolysis-inhibiting resin design and additive-mixing technologies.



## Lithium– Ion Batteries

Materials for Lithium-Ion Batteries

Contributing to the evolution of highperformance batteries is essential in a smart technology-based society

#### **Social Imperative**

## Increase the energy density and reliability of lithium-ion batteries

In addition to being smaller and lighter and offering higher capacity and voltage than other secondary batteries, lithium–ion batteries (LiBs) charge quickly. For these reasons, LiBs are expected to play an important role in the years ahead in everything from smartphones, tablet computers and PCs to electric vehicles and aircraft, as well as in smart cities and other energy-conscious infrastructures of the future. Challenges facing battery manufacturers include making LiBs thinner and lighter by achieving higher energy density, as well as prolonging battery lifespan, shortening charge time and increasing safety.

#### Develop active materials that increase lithium-ion storage capacity

DIC's Response

 $\blacktriangleright$ 

LiB charges drain quickly because of the limited ion absorption capacity of the active material (graphite) used for the anode, to which lithium ions move from the cathode during discharge. To date, this has prevented further increases in energy density.

Employing its distinctive synthesis technologies for nanolevel composites\*<sup>2</sup>, DIC is currently developing an advanced, high-capacity alternative active material for anodes that if commercialized will make it possible to use mobile devices longer and drive electric vehicles further on a single charge.

Extending the duration of LiB charges

Safetv/

Reliability

Anode

Charge Li+ Electrolyte solution

Discharge

Li+

(Transfer a high volume of lithium ions!)

Amass a high volume of lithium ions here!

Anode collector (copper foil)

Active material (graphite)
 Separator

Active material (e.g., lithium cobalt oxide)

Cathode binder Cathode collector (aluminum foil) Active material (graphite

Anode binder



under development by DIC

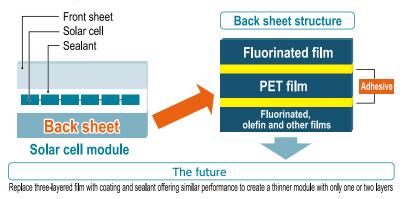
\*2 Composite materials, or composites, are materials made from two or more different constituent materials that when combined deliver a performance that is superior to that of either of the materials used alone.

3Rs Aging Society



This adhesive is used in many solar cell modules, having performed well over more than 3,000 hours in testing at 85°C and 85% humidity. In 2013, DIC developed a weatherresistant coating that absorbs UV rays and a highly heat- and moisture-resistant sealant. Used together, the coating and sealant enhance back sheet durability and help extend the lifespan of solar cell modules.

#### Structure of typical solar cell module



#### **KEY PERSON** of DIC

#### We are accelerating development efforts with the aim of enhancing thinness and reducing costs.

If we can develop a coating and sealant offering the same weatherability as film, it would enable us to reduce the number of film layers to two or even one. DIC has developed multifunctional packaging and construction material coatings that have contributed to weight reduction while also

lowering costs. We are pressing forward with R&D aimed at realizing similar innovations for solar cells.

Group Manager, Dispersion Technical Group 2, Dispersion Technical Div. 1 Masami Hozumi



\*1 Solar cell modules are panels comprising solar cell sheets connected in a series to obtain the required voltage and current.

#### KEY PERSON of DIC

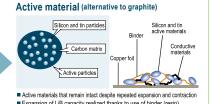
#### We are maximizing key **DIC Group synergies to** revolutionize LiB technologies.

Although there is plenty of research being conducted into the use of silicon and tin as active materials to increase the capacity of LiBs, the fact is that it is difficult to control expansion and contraction. By leveraging its core technologies, DIC has succeeded in precisely controlling nanoparticle distribution, a potential solution to this issue. Going forward, we will strive to contribute to technological innovation in

this area by maximizing synergies with our multiple other core technologies.

Principal Researcher, Functional Materials Group 3. Core Value Research Center, Corporate R&D Div. Shinji Kato





Expansion of LiB capacity realized thanks to use of binder (resin) that follows expansion and contraction

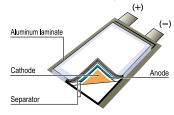
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#### Develop an adhesive for LiB pack containers that offers outstanding electrolyte resistance

Laminated multilayer film is steadily replacing conventional metal as the preferred material for the containers used to hold LiB packs. Advantages offered by laminated containers include low electrical resistance, high heat dissipation and formability.

In 2013, DIC drew on the vast pool of composite materials formulation technologies it has accumulated in the area of food packaging to develop a new adhesive for laminated LiB pack containers. Adhesives used to bond films to aluminum foil substrates must remain strong, even when immersed in highly acidic electrolyte solution. DIC responded by greatly enhancing adhesiveness, thereby realizing excellent shielding properties and productivity.

#### Structure of laminated LiB pack container



**CO**<sub>2</sub> 14

#### KEY PERSON of DIC

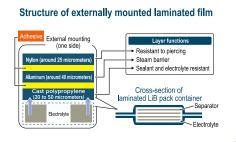
#### **DIC's greatest strength** is its sophisticated laminating technologies.

These laminated films were not created simply by bonding together aluminum foil substrates and films. We dramatically increased electrolyte resistance by interposing a newly developed adhesive between two substrates with significantly different properties. Made possible by our proprietary resin mixing

technologies, this adhesive is a solution that we can offer with confidence.

Head Researcher, Dispersion Technical Group 2. Dispersion Technical Div. Tatsuya Koyama





Highly Information-**Oriented Society** 

Comfortable Resource Conservation

Lifestyles





# Printed Electronics Materials for Printed Electronics

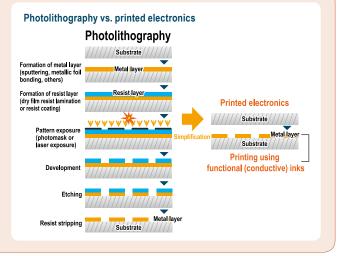
### Making today's advanced information society easier to navigate and more environment-friendly



#### Social Imperative

#### Simplify patterning processes for electronic circuits to reduce consumption of resources and energy and production costs

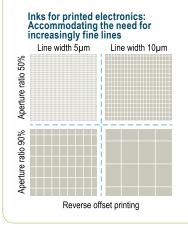
Photolithography is the process most commonly used to form patterns on electronic circuits, which are what make electrical appliances work. Nonetheless, photolithography has a number of downsides, notably the fact that it is a multistage process requiring substantial capital investment and that it uses significant volumes of raw materials, including rare metals, and energy and emits substances that negatively affect the environment. Such considerations have prompted great interest in printed electronics, which uses printing technologies to create devices, as a viable alternative that greatly simplifies patterning, reducing facility needs, energy consumption and the emission of environmentally damaging substances.



#### **DIC's Response**

#### Develop inks for printed electronics that deliver high resolution and facilitate low-temperature baking

The printing of circuit patterns demands conductive inks that deliver high resolution. Quality determines the reliability of a circuit or device. DIC has leveraged its proprietary dispersion technologies to develop inks for printed electronics that accommodate the need for increasingly fine lines. A low baking temperature means that these inks can be used to print patterns on substrates made of plastics and other materials that are less resistant to heat. Potential applications for these inks are diverse and include electronic paper, displays, solar cells and organic TFTs\*.



#### Patterning: Comparison between photolithography and printing with DIC inks

		Printing with DIC inks	Photolithography
Pro	oduction costs	Low	High
Infras	structure required	Small to medium	Large
	Environment	Air	Vacuum
Dragona	Production processes	Few	Many, complex
Process Baking temperature	Baking temperature	Low to medium	Low to high
	Takt time	Short to medium	Long
Envir	onmental impact	Minimal	Significant
	Precision	Medium to high	High



#### We are driving change by capitalizing on DIC's innovative materials technologies and printing ink design capabilities.

Our inks for printed electronics were made possible by the integration of DIC's raw materials technologies, compounding technologies-which determine the properties of ink-and mass production technologies. However, there are numerous key factors besides conductive inks that need to be considered in printed electronics, including insulators and semiconductors, meaning that it is crucial for us to take into account overall systems. We look forward to capitalizing further on our design capabilities for materials and printing inks and our expertise in matching inks to printing equipment needs to contribute to the realization of next-generation technologies for printed electronics.

ΡE

DIC's inks for printed electronics were awarded an Outstanding Achievement Prize at FPD International 2013 (Yokohama, Japan)

Head Researcher, PE Development Group, Core Value Research Center, Corporate R&D Div. Hirotomo Sasaki

\* Organic TFTs—thin transistors that use organic semiconductors for the active layer—are under development with the aim of facilitating the low-cost production of large electronics products.



## **Sun Chemical Revamps its Website**

The Sun Chemical Group, a core member of the DIC Group with operations in North America and Europe, recently revamped its website, improving search capability and simplifying navigation.

WEB http://www.sunchemical.com

#### Sun Chemical introduces a new website

In October 2013, Sun Chemical launched a new global website that can be utilized by both current and prospective customers from printers using flexographic, sheetfed or web offset printing to packaged goods brand owners, cosmetics formulators and automotive coatings manufacturers—to gain more information about Sun Chemical products, services and innovations. Created to help customers discover solutions that suit their business needs, the new website features a bold new design, an improved search capability, content that has been optimized to take full advantage of search engines and simplified navigation. The website is also socially connected.

#### Providing diverse value

The improved functionality and search capability makes it easier for customers to find solutions designed for various market segments and customer applications, making it a place where customers can find what they want and discover innovations that will add new value to their businesses. For the first time, Sun Chemical also included an "Innovation" section that highlights new Sun Chemical products and services, ranging from electronics materials, special effect coatings and low-migration inks to brand protection and brand color management. By monitoring and measuring website traffic, Sun Chemical will gain insights into the needs of current and prospective customers, enabling it to modify content in-house and giving it the flexibility to make online updates in the event of business or industry changes.



**VOICE** from the DIC Group

#### We have created a powerful tool for communicating with customers.

The new website gives Sun Chemical an improved platform for communicating with current and prospective corporate customers, as well as with employees. Making the site more intuitive and interactive has also made it more useful. The most challenging part of the project was sifting through more than 10,000 pages of existing content to narrow down information pertinent to customers while at the same time being mindful of the importance of improving search capability, optimizing content to take advantage of search engines and simplifying navigation.

We learned through this experience that less is more. The volume of content had to be reduced to avoid overwhelming customers. Navigation had to be easy and relevant to site visitors. The information available had to enable readers to make informed decisions and to contact Sun Chemical directly.



Vice President, NAI Marketing, Sun Chemical Corporation Penny Holland



### DIC Expands Supply Capabilities for *Linablue*<sup>®</sup> Natural Blue Food Coloring

Rising concern for the health benefits and safety of food is accelerating a shift toward using natural, rather than synthetic, colorings in the food products industry. As the world's largest manufacturer of one of the few natural blue colorants in existence, the DIC Group intends to bolster its supply capabilities by building a new plant in the United States.

## *Linablue*<sup>®</sup>—A natural blue colorant extracted from edible algae

The DIC Group's *Linablue*<sup>®</sup> natural blue food coloring is made from phycocyanin, a vivid blue colorant extracted from Spirulina grown under special conditions.

Having begun research into Spirulina after noting its role as a high-quality nutrient in traditional diets in Africa, in 1977 DIC became the first in the world to develop commercially viable technologies for managed Spirulina cultivation. In the years since, DIC has manufactured and marketed Spirulina-based nutritional supplements as well as become the world's leading supplier of natural blue food coloring, which it supplies for use in confectionery and desserts, among others.



## Japan's role as a driving force behind the shift toward natural food colorings

Consumer awareness of the potential health hazards of artificial food colorings has long been high in Japan. Accordingly, the trend toward natural food colorings is well established.

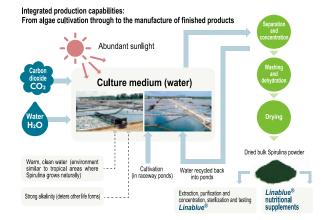
In Europe and North America, where popular dislike of synthetic food colorings is said to have begun around 2008, the shift to natural food colorings has accelerated in recent years. It was against that backdrop that in September 2013 Spirulina became the first natural blue food coloring to be approved by the U.S. Food and Drug Administration, while in Europe the European Commission presented natural color guidelines that authorized sales of *Linablue*<sup>®</sup>, achievements that served to reconfirm *Linablue*<sup>®</sup>'s reputation for outstanding safety. Looking ahead, DIC expects demand for *Linablue*<sup>®</sup>, already strong in Japan, the Republic of Korea (ROK) and the PRC, to expand in Europe. North America and Southeast Asia.

## Maintaining safety and quality by integrating manufacturing to cover raw materials through production

To ensure premium-quality products, it is vital to manage quality at all stages of the production process, from the cultivation of high-grade algae on strictly managed farms to the processing of the algae into powder. Quality thus remains a core focus in all processes, from phycocyanin extraction to refining and concentration, color modification and sterilization. This strong commitment to safety and quality underscores the market dominance of *Linablue*<sup>®</sup>. It is also worth noting that algae absorbs carbon dioxide and produces oxygen as it grows, for every 800 tons of Spirulina cultivated 1,200 metric tons of carbon dioxide are absorbed.



U.S. - based Earthrise Nutritionals, LLC., is currently building a new plant for *Linablue®* in California.



#### **VOICE** from the DIC Group

## In the future, we will also extract and commercialize colorants other than blue from Spirulina.

In addition to blue, Spirulina is a source of a green colorant (from chlorophyll) and an orange colorant (from carotenoids), as well as of a number of useful active ingredients. We are currently working toward the commercialization of products based on these other Spirulina-derived colorants, which will enable us to expand our supply of safe, attractive products to people worldwide.

General Manager, Colorants Sales, DIC Lifetec Co., Ltd. Kiyotaka Okada



## **Corporate Governance**

WEB http://www.dic-global.com/en/about/governance.html

### Basic Approach to Corporate Governance

The DIC Group identifies the purpose of corporate governance as being to ensure effective decision making pertaining to its management policy of achieving sustainable corporate growth and expansion through sound and efficient management, while at the same time guaranteeing the appropriate monitoring and assessment of and motivation for management's execution of business activities. With the aim of achieving a higher level of trust on the part of shareholders, customers and other stakeholders and enhancing corporate value, DIC promotes ongoing measures to reinforce its management system and ensure effective monitoring thereof.

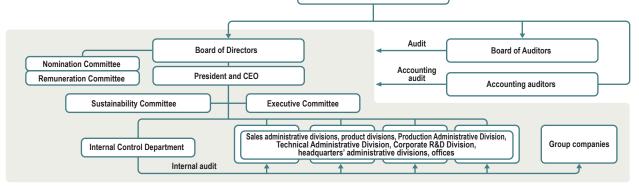
### Corporate Governance Organization

A company with internal auditors, DIC maintains a Board of Directors and a Board of Auditors. As well as appointing two highly independent outside directors, DIC has instituted an executive officer system, a move aimed at separating decision making and implementation and thereby accelerating business execution and clarifying responsibilities. DIC also has a Nomination Committee and a Remuneration Committee, which include the two outside directors, to ensure objectivity in the nomination and selection of, and determining remuneration for, directors and executive officers. The four-member Board of Auditors, which includes two attorneys as outside auditors, liaises with the accounting auditors and the internal auditing department.

### System of Internal Control

To ensure fair business practices, the Board of Directors has set a basic policy on internal control that encompasses, among others, compliance with laws and regulations and DIC's Articles of Incorporation, risk and information management and the creation of systems to foster business efficiency. Specific initiatives to date have included formulating a code of business conduct that encompasses a whistle-blowing system, various risk management initiatives implemented by the Sustainability Committee, the establishment of various internal rules and monitoring (internal controls audits and environment and safety audits). The Board of Directors also hears annual reports on the measures implemented in line with the policy on internal control.

#### **Corporate Governance Organization**



Meeting of Shareholders

#### Leveraging its Position as a Global Manufacturer of Fine Chemicals to Support the UNGC

#### WEB http://www.dic-global.com/en/csr/philosophy/management/gc.html

Seeking to fulfill its responsibilities as a member of the international community in a more proactive manner, in December 2010 the DIC Group pledged its support for 10 principles put forward by the United Nations (UN), as well as for the UN's Millennium Development Goals (MDGs), and became a signatory to the United Nations Global Compact (UNGC).

Initially proposed in 1999, the UNGC is a voluntary initiative for companies that seeks to achieve sustainable development worldwide. More than 8,000 companies and organizations have pledged their support for the UNGC in the belief that global sustainable development is possible if companies align their business practices with 10 globally accepted principles in the areas of human rights, labor, the environment and the prevention of corruption, and fulfill their social responsibilities.





## Sustainability Report

## **Goals and Achievements of Major Sustainability Initiatives**

Principal theme	Objective of initiatives	Relevant page	Goals for fiscal year 2013
Compliance (Ensure fair and	Raise awareness of compliance.	P27	Complete and distribute globally applicable code of business conduct pertaining to compliance (Japanese, English and other languages).
transparent corporate activities)	Conduct business fairly.	F21	Complete and distribute subsidiary director checklists based on legal requirements of each country.
			Expand scope of BCPs for main products revised in fiscal year 2012 under new corporate organization to include domestic and overseas Group companies.
Risk management (Decisive efforts to reduce or preclude risks related to the operating	Ensure business continuity for the DIC Group.	P28	Take steps to address issues recognized as a result of training in 2012; revise manuals and implement training.
environment)			Prepare task force manuals for individual potential risks.
Information security (Measures aimed at achieving and maintaining the security of information)	Establish a global information security framework.	P29	<ul> <li>Promote maintenance of the information security system and appropriate responses to internal audit results.</li> <li>Establish security management systems in domestic and overseas Group companies.</li> </ul>
	Foster and endorse the advancement of local staff overseas with the aim of advancing global management.	P42 P43	<ul> <li>Complete creation of various human resources systems at two overseas subsidiaries in Thailand and in the Philippines and begin creation of such a system at subsidiary in Malaysia.</li> <li>Promote establishment of global human resources databases for each business area.</li> </ul>
Human resources management and measures to improve employee job satisfaction	Encourage women in the workplace with the aim of securing a diverse labor force and supporting diverse working styles.		<ul> <li>Expand employment opportunities for women by reviewing the assignment of women to positions in manufacturing and determine policy for the future.</li> <li>Effectively implement systems designed to support female employees balancing the demands of work and childbirth, childcare, nursing care and other responsibilities.</li> </ul>
job satisfaction	Promote the hiring of individuals with disabilities with the aim of securing a diverse labor force and supporting diverse working styles.	P42	Continue promoting the hiring of individuals with disabilities to ensure consistent compliance with the increase in Japan's legally mandated quota for employment of disabled persons from 1.8% to 2.0%.
Supply chain initiatives (Promote effective supply chain management	Create foundation for fair purchasing practices.	- P45	Collect CSR promotion reply sheets from suppliers in the PRC and Southeast Asia and, having confirmed status of CSR promotion thereof, provide feedback.
to support global business expansion)	Promote CSR procurement.	- <b>F</b> 40	Partially revise the DIC Group CSR Procurement Guidelines; publish updated version of the <i>DIC Group Supply-chain CSR</i> <i>Deployment Guidebook</i> in July.
Promote businesses that address social imperatives	Propose new businesses that respond to	P46 -	Bring social needs to light Broadly abstract needs and technological themes rooted in social imperatives by forecasting global megatrends and new markets emerging as a result thereof.
(Establish solutions-oriented businesses)	evolving social imperatives.		Provide solutions Plan new businesses that clarify the value the DIC Group can offer to facilitate the provision of solutions to abstracted social needs.
New technology development and	Enhance ability to develop products and technologies that facilitate sustainable	P47 -	Reinforce operational capabilities of Group companies, including those in overseas markets.
value creation (Promote the	contributions to society.		Promote the development of products that combine multiple technologies.
establishment of solutions-oriented businesses)	Promote development of environment-friendly products and services.	P48	<ul> <li>Promote environment-related research themes.</li> <li>Ensure the swift launch of new environment-friendly products.</li> </ul>

Achievements in fiscal year 2013	Evaluation	Goals for fiscal year 2014 and 2015
Japanese- and English-language versions of The DIC WAY Group Code of Conduct were essentially completed.	**	Complete a Chinese-language version of The DIC WAY Group Code of Conduct, in addition to the Japanese- and English-language versions, and use presentations and e-learning to promote awareness.
Checklists were essentially completed for subsidiary directors in 19 countries.	**	Complete additional subsidiary director checklists and promote use thereof though a training program focused on legal issues.
BCPs were formulated under the new corporate organization for the main products in each product division (July 2013).	***	Promote product division-led efforts to revise/maintain BCPs for main products in cooperation with sales administrative divisions, the Production Administrative Division and domestic and overseas Group companies; abstract and evaluate potential risks related to the operating environment, society, economy and governance; and identify risks of which the DIC Group must be mindful.
Based on the results of training in 2012, the headquarters earthquake task force response manual was revised (August 2013).	**	Conduct systematic training based on the revised manual.
For the second consecutive year, a new headquarters task force serious accident response manual and a new serious accident press conference manual were prepared, but certain parts of the manuals carried over into 2014.	*	Acting through the Risk Management Conference, promote the preparation and use of task force response manuals by pertinent departments.
<ul> <li>Adjustment of the fiscal year was completed across the information security system.</li> <li>Preparation of management regulations and guidelines for use in the PRC and Southeast Asia (Chinese- and English-language versions) was completed for publication and introduction in fiscal year 2014.</li> </ul>	**	<ul> <li>Optimize information management by formulating and publishing a global security policy and guidelines.</li> <li>Secure and reinforce information security by maintaining and enhancing the information security system.</li> </ul>
<ul> <li>A policy on the treatment of employees was formulated for CEOs of overseas DIC Group companies.</li> <li>Adoption of a unified framework for human resources systems was completed at Group companies in the Philippines, but is still in progress at Group companies in Thailand.</li> </ul>	**	<ul> <li>Conduct voluntary human rights and labor practices inspections within the Group.</li> <li>Promote efforts to foster global human resources.</li> </ul>
In line with the goal of expanding employment opportunities for women, recruitment drive in fiscal year 2014 resulted in the hiring of four women for assignment to manufacturing departments. Additionally, reviews were conducted for 11 female employees currently assigned to manufacturing departments. Systems in place for supporting female employees balancing the demands of work and childbirth, childcare, nursing care and other responsibilities were implemented properly.	**	<ul> <li>Review and establish a policy for the assignment of female employees to sales positions with the aim of broadening the range of jobs open to women.</li> <li>Ensure the appropriate administration of programs designed to assist employees balancing the demands of work and childcare or nursing care responsibilities.</li> </ul>
In light of the increase in Japan's legally mandated quota for employment of disabled persons from 1.8% to 2.0%, 10 individuals with disabilities were hired in fiscal year 2013. As of March 31 2014, disabled individuals accounted for 2.22% of DIC's total labor force.	***	Promote the hiring of individuals with disabilities; maintain quota o 2.2% of total labor force, thereby ensuring consistent compliance with Japan's legally mandated quota (2.0%).
The provision of feedback to suppliers in Southeast Asia was completed. Briefings were held for certain DIC Group companies in the synthetic resins business in the PRC. Distribution of the <i>DIC Group Supply-chain CSR Deployment Guidebook</i> to and collection of CSR promotion reply sheets from local suppliers commenced.	**	In the PRC, hold briefings for DIC Group printing inks companies; conduc CSR procurement field surveys of suppliers and provide feedback. I Southeast Asia, begin preparations for CSR procurement field surveys in lin with version 2 of the DIC Group Supply-chain CSR Deployment Guidebook.
DIC Group CSR Procurement Guidelines were partially revised. The <i>DIC Group Supply-chain</i> <i>CSR Deployment Guidebook</i> was revised to include new categories and enhanced information and published as version 2; English- and Chinese-Ianguage versions will also be published to help strengthen promotion of CSR procurement overseas.	***	Implement second round of CSR procurement inquiries in Japan in line with version 2 of the DIC Group Supply-chain CSR Deployment Guidebook Confirm status of CSR procurement and improvements since previous round and provide feedback to all suppliers surveyed. Continue on-site inquiries on certain suppliers.
Plans were made to commercialize materials for storage batteries, power devices and printed electronics, products that respond to needs driven by, among others, the rising popularity of electric vehicles and the growing trend toward wearable and other new types of devices resulting from the increased sophistication of information networks.	***	Cultivate solutions-oriented businesses Anticipate new social needs arising from global megatrends and pl new businesses that provide solutions to those needs.
Plans were made to commercialize materials for storage batteries, power devices and printed electronics, products that respond to needs driven by the growing trend toward wearable and other new types of devices arising from the increased use of electronic controls in vehicles and the growing sophistication of information networks.	**	Enhance the DIC brand Promote awareness of the DIC brand by making use of produguidebooks, exhibitions and other communications tools and valuable opportunities to promote awareness of the DIC brand.
With the aim of positioning Thailand as the headquarters for activities related to printing inks technologies in the Asia–Pacific region, a new printing inks technology center was established in Thailand and commenced operations in January 2014.	**	Establish framework for overseas R&D bases.
The Product Innovation Center, which is tasked with accelerating the commercialization of products that combine multiple technologies and products developed by the R&D department, was established; supported by the concentrated investment of R&D resources, the center is promoting R&D activities.	**	Ensure the swift launch of products that combine multip technologies.
Environment-friendly products accounted for 57% of all products.	**	<ul> <li>Promote environment-related research themes.</li> <li>Ensure the swift launch of new environment-friendly products.</li> </ul>

Evaluations are based on self-evaluations of current progress. Key: $\star \star \star =$ Exce	ellent; $\star \star$ = Satisfactory; $\star$ = Still needs work
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## **Goals and Achievements of Major Responsible Care Initiatives**

Principal theme	Objective of initiatives	Relevant page	Goals for fiscal year 2013
	Contribute to the prevention of global warming. Promote energy consumption.	P34	DIC Group (Japan): 1. Reduce energy consumption per unit of production by 1% from the fiscal year 2012 level. 2. Reduce CO <sub>2</sub> emissions by 1% from the fiscal year 2012 level.
Environmental	Reduce industrial waste disposed of as landfill (achieve "zero emissions"). Reduce volume of industrial waste discharged from production facilities.	P36 P37	Waste disposed of as landfill DIC: 52 tons (+8.7% from fiscal year 2012) DIC Group (Japan): 110 tons (+3.6% from fiscal year 2012) Waste from production facilities DIC: 15.977 tons (+1.0% from fiscal year 2012) DIC Group (Japan): 65,269 tons (-6.0%)
safeguards (Reduce the environmental impact of business	Promote recycling.	WEB	Promote recycling at DIC Group companies in Japan and strive to improve resource recycling.
activities)	Control emissions of chemical substances (PRTR-designated substances: 354; substances targeted by JCIA* for voluntary control: 126).	- P35 -	DIC: 296 tons (level with fiscal year 2012) DIC Group (Japan): 558 tons (-1.8% from fiscal year 2012)
	Reduce VOC emissions into the air.	100	DIC: 281 tons (-0.7% from fiscal year 2012) DIC Group (Japan): 544 tons (-1.9% from fiscal year 2012)
Occupational	Ensure occupational safety and health. Promote hands-on safety training.	P32 P33	<ul> <li>Assess risks associated with capital investments.</li> <li>Analyze accidents and ensure the timely provision of information</li> <li>Provide enhanced, and continuous training.</li> </ul>
safety and health, accident prevention	Promote the sharing of information on safe working environments among DIC Group companies in Japan and overseas.	P32	<ul> <li>Continue the activities of Safe Corporate Climate Cultivation Working Groups and summarize proposals made in fiscal year 2012.</li> <li>Use working group meetings as a forum for sharing safety-related information.</li> </ul>
Safety in	Reduce emissions of greenhouse gases during transport.	- P33 -	1. Promote modal shift and improve transport efficiency. 2. Reduce $CO_2$ emissions from logistics.
logistics	Ensure the safe management of chemical substances during transport.		<ul> <li>Provide information that facilitates the identification of Yellow Card numbers on delivery slips.</li> <li>Continue providing training on potential problems during transport.</li> </ul>
Safety of chemical substances/	Address challenges associated with greenhouse gases (respond to demands for the disclosure of information on chemical substances contained in products).	P38	<ul> <li>Continue to prepare SDSs for all chemical products and distribute via websites.</li> <li>Use the Wercs to prepare SDSs and labels; introduce this system at overseas Group companies and establish an environment to facilitate its use from fiscal year 2014.</li> </ul>
products	Comply with overseas regulations (e.g., the EU's REACH regulation).	100	<ul> <li>Proceed with efforts to respond to the PRC's Regulations on Safe Management of Hazardous Chemicals in China.</li> <li>Remain aware of developments related to chemical substance regulations in the ROK (K-REACH) and take steps to ensure compliance once regulations have been formally established.</li> </ul>
Communicating with the community	Report on Responsible Care initiatives. Prepare individual site reports.	P31 P52	Publicly disclose ESH-related performance data for DIC Group companies in Japan and overseas.
Quality management (Customer		P41 -	Use of QMS standards such as ISO 9001 as tools to improve the quality of work and advance customer satisfaction.
(Customer satisfaction)	Secure product quality.		Ascertain and organize QMS tasks for DIC's matrix-like quality management organization and at the same time support improvement initiatives with the aim of enhancing quality management practices.
Support for environmental and	Encourage the safety and environmental management initiatives of Group companies in the Asia–Pacific region.	P39 P40	<ul> <li>Hold a meeting for personnel in charge of safety at Group companies in the Asia–Pacific region; provide guidance regarding MBO.</li> <li>Implement safety and environmental audits.</li> </ul>
safety initiatives of overseas Group companies	Manage safety and environmental data	P35 P39–40	<ul> <li>Promote the collection and analysis of safety and environmental data from across the DIC Group and support efforts to improve MBO.</li> <li>Select sites in need of special safety-related support; extend such support in cooperation with regional headquarters.</li> </ul>

\* Japan Chemical Industry Association (a general incorporated association): As one of the Japan's major industry organizations, JCIA is a member of the International Council of Chemical Associations (ICCA) and pursues the healthy development of the chemical industry with other chemical-industrial organizations around the world.

Achievements in fiscal year 2013	Evaluation	Goals for fiscal year 2014
<ul> <li>DIC Group (Japan):</li> <li>1. Energy consumption per unit of production declined 1.5%.</li> <li>2. CO<sub>2</sub> emissions rose 6.4%, owing to an increase in the CO<sub>2</sub> emissions factor for purchased electric power.</li> </ul>	*** *	DIC Group (Japan): 1. Reduce energy consumption per unit of production by 1% from the fiscal year 2013 level. 2. Reduce CO <sub>2</sub> emissions by 1% from the fiscal year 2013 level.
DIC: 44.5 tons (-6.9% from fiscal year 2012) DIC Group (Japan): 85.6 tons (-19.3% from fiscal year 2012) DIC: 16,022 tons (+1.9% from fiscal year 2012) DIC Group (Japan): 65,952 tons (+0.1% from fiscal year 2012)	**	DIC: 45.6 tons (+2.5% from fiscal year 2013) DIC Group (Japan): 80.3 tons (-6.2% from fiscal year 2013) DIC: 16,774 tons (+4.7% from fiscal year 2013) DIC Group (Japan): 53,951 tons (-18.2% from fiscal year 2013)
Resource recycling rate DIC: 85 (-3.0 percentage points from fiscal year 2012) DIC Group (Japan): 95.0% (-1.0 percentage point from fiscal year 2012)	**	Promote recycling at DIC Group companies in Japan and increase resource recycling rate.
DIC: 271 tons (-8.0% from fiscal year 2012) DIC Group (Japan): 466 tons (-17.0% from fiscal year 2012)	***	DIC: 292 tons (+7.0% from fiscal year 2013) DIC Group (Japan): 402 tons (-14.0% from fiscal year 2013)
DIC: 261 tons (-8.0 from fiscal year 2012) DIC Group (Japan): 456 tons (-18.0% from fiscal year 2012)	***	DIC: 279 tons (+7.0% from fiscal year 2013) DIC Group (Japan): 390 tons (-14.0% from fiscal year 2013)
<ul> <li>Assessment guidelines were established for process risks and for formula management and steps taken to publicize widely; related training sessions were held.</li> <li>Causes of accidents were analyzed and information was provided/shared in a timely manner.</li> <li>The DIC Group in Japan continued to conduct hands-on safety training.</li> </ul>	***	Increase risk assessment skills and continue to conduct assessments.     Share and make effective use of accident-related information across the DIC Group.     Establish hands-on safety training as a permanent component of employee education and make effective use thereof.
<ul> <li>Safety posters were prepared and distributed.</li> <li>Employees were encouraged to form groups to read and study <i>Principles of Safe Conduct</i></li> <li>Information was shared on a variety of topics.</li> </ul>	***	<ul> <li>Continue the activities of Safe Corporate Climate Cultivation Working Groups.</li> <li>Share safety information at working group meetings.</li> </ul>
1. Energy used per unit of production declined 5.5% from fiscal year 2012. 2. CO <sub>2</sub> emissions from logistics declined 1.7% from fiscal year 2012.	*** ***	<ol> <li>Promote modal shift and improve transport efficiency with the air of reducing energy used per unit of production.</li> <li>Reduce CO<sub>2</sub> emissions from logistics.</li> </ol>
<ul> <li>The code framework was reviewed and organized to facilitate the identification of Yellow Card numbers on delivery slips.</li> <li>Training on potential problems during transport was offered.</li> </ul>	***	<ul> <li>Formulate measures for preventing problems during transport and deploy across the DIC Group.</li> <li>Promote the safe management of chemical substances during transport.</li> </ul>
<ul> <li>Distribution of SDSs via websites continued.</li> <li>Use of the Wercs began and a framework for expanding the system's introduction by overseas Group companies was completed.</li> </ul>	*** ***	<ul> <li>Take steps to respond to GHS Rev. 4.</li> <li>Begin use of the Wercs at domestic DIC Group companies.</li> </ul>
<ul> <li>Gathered necessary information for Registration of Hazardous Substances.</li> <li>Submitted a public comment on the draft version of the enforcement order.</li> </ul>	***	<ul> <li>Pursue inclusion in the Registration of Hazardous Substances (PRC).</li> <li>Prepare for the launch of K-REACH (ROK).</li> </ul>
<ul> <li>Performance data was disclosed for DIC Group companies in Japan and overseas.</li> <li>The CSR report, DIC website and individual site reports were used to promote dialogue with local residents and plant visitors as part of the Group's risk communication efforts.</li> </ul>	***	Prepare a system to facilitate the gathering of uniform performance data for the entire DIC Group and continue to promote Responsible Care initiatives.
<ul> <li>Promote skill-building training for in-house auditors with the aim of improving the effectiveness of in-house audits.</li> <li>Conduct quality audits in product divisions to clarify QMS-related issues; implement measures to resolve such issues.</li> </ul>	***	<ul> <li>Promote skill-building training for in-house auditors with the aim of improving the effectiveness of in-house audits.</li> <li>Promote QMS initiatives with the aim of securing solid QMS coordination within DIC's matrix-like quality management organization.</li> </ul>
<ul> <li>PRC: A meeting was held for personnel in charge of environmental initiatives at Group companies in April 2013; 18 Group companies participated.</li> <li>Asia–Pacific region: A meeting was held for personnel in charge of safety at affiliates in April 2013; 17 Group companies participated.</li> <li>Safety and environmental audits were conducted at 16 companies in the PRC, three companies in Taiwan and eight companies in the Asia–Pacific region.</li> </ul>	***	<ul> <li>Expand the number of sites offering hands-on safety training.</li> <li>Continue to hold meetings for personnel in charge of safety.</li> <li>Continue to conduct safety and environmental audits.</li> </ul>
Data was collected and analyzed from Group companies in the PRC and the Asia-Pacific region and from Sun Chemical Group companies and objectives were set in order of precedence.	***	<ul> <li>Collect and analyze data from all overseas Group companies and set objectives in order of precedence.</li> <li>Continue to assist the efforts of three subsidiaries in the Asia–Pacific region and four in the PRC positioned as sites in need of special safety-related support.</li> </ul>

Evaluations are based on self-evaluations of current progress	. Key: $\star \star \star =$ Excellent; $\star \star =$ Satisfactory; $\star =$ Still needs work
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### Compliance

## Towards Fair and Transparent Corporate Activities

WEB http://www.dic-global.com/en/csr/philosophy/management/compliance.html

# Basic Approach to Compliance

Compliance in the DIC Group encompasses not only obeying laws but also acting properly and in keeping with social norms. With the aim of ensuring sustainable growth of businesses that are both fair and transparent, DIC formulated The DIC WAY Code of Business Conduct, a unified set of guidelines the adherence to which it considers to be the foundation of compliance. DIC compels all DIC Group employees to conduct themselves in accordance with the code.

### Framework for Promoting Compliance

The DIC WAY Code of Business Conduct embodies principles of conduct based not only on compliance with national laws and international rules but also on principles essential to the business practices of DIC Group employees. The DIC Group promotes the understanding and entrenchment of the code not only by holding explanatory seminars but also through e-learning. To enhance awareness of compliance, the Group also provides training focused on legal issues for new employees, as well as for employees who have been promoted and transferred overseas.

## System to Ensure Respect for Compliance

The DIC Group has established a global compliance promotion system led by DIC Corporation (Japan), Sun Chemical Corporation. (Europe and the United States), DIC (China) Co., Ltd. (PRC), and DIC Asia Pacific Pte Ltd (Asia and Oceania) as the core members. In addition, the DIC Group established a whistleblowing system. In cases where there is an issue or question regarding compliance, one can directly report the matter to the compliance division. We have also established external whistleblowing hotlines that can handle reports in the languages of more than 160 countries. When a report is received, we respond swiftly and appropriately with due consideration for pertinent laws while also incorporating internal and external opinions with the aim of identifying and correcting misconduct or other compliance violations as quickly as possible.

#### Basic Outline of the DIC WAY Code of Business Conduct

- (1) Basic business practices
- (2) Employee rights to respect, dignity and privacy
- (3) Environment, safety and health (ESH)
- ( 4 ) Avoiding conflicts of interest/responsibility to protect DIC Group assets
- (5) The DIC Group's policy regarding the prevention of corruption and bribery
- ( 6 ) Relationships with customers, suppliers, third parties and public officials
- (  ${\bf 7}$  ) Money laundering and the prevention of terrorism
- (8) Forced labor, child labor and conflict minerals
- (9) Insider trading
- (10) Internal controls to ensure the appropriateness of accounting and financial reporting

VOICE from the DIC Group

#### Our goal is to enhance global legal services.

I serve as General Counsel and Secretary of Sun Chemical. In this role I am responsible on a global basis for Sun Chemical's legal, intellectual property, real estate, regulatory compliance, and environmental, health and safety functions. I am proud of the work performed by each of these areas and of the collaborative working relationship that we have with DIC. As an example of the exceptional work performed Sun Chemical employees, our Legal Group was recently named the "Legal Department of the Year" by the *New Jersey Law Journal*. This award is in recognition of the group's outstanding work in providing legal services to the Sun Chemical organization and in managing relationships with outside counsel located around the world.



Vice President, General Counsel and Secretary, Sun Chemical Corporation Jim Van Horn

## Reducing Business Risks and Preventing Recurrences of Incidents

WEB http://www.dic-global.com/en/csr/philosophy/management/bcm.html

### Risk Management in the DIC Group

Risk management is a key theme of the DIC Group's overall sustainability policy. The Risk Management Conference spearheads efforts to manage all types of risks, abstracting, identifying, appropriately evaluating with the potential to undermine the Group's sustainability and taking steps to ensure their reduction or elimination. The conference also promotes ongoing efforts to build, maintain and operate systems and procedures to facilitate swift responses in crisis situations. Having defined risk management as maximizing returns and continuously enhancing corporate value by managing risks from a Companywide perspective using rational, optimal methods, DIC recognizes risks in three principal categories: risks arising from natural events or social circumstances that are beyond its control; risks that affect all Group business activities and should be dealt with by specialized departments; and risks that affect the activities of individual businesses and should be handled by the relevant departments. The Company has strengthened measures for high-priority and urgent risks that are beyond its control, notably by producing crisis management manuals and conducting emergency drills to ensure preparedness for disasters. The Risk Management Conference is also enhancing responsiveness by customizing solutions and promoting initiatives related to various risks that must be addressed by specialized departments.

## Business Continuity Management

A key business continuity management (BCM) initiative within the DIC Group was to list major products for which no alternatives are available and for which any interruption of supplies would have a significant negative impact on society and to formulate business continuity plans (BCPs) for these products in collaboration with relevant production, technical, sales and purchasing departments. The Group has also prepared lists that include products for which requests for BCPs have been received from customers, which it draws on as part of its ongoing effort to promote practical solutions by promoting measures aimed at, among others, facilitating substitute production at other plants in the event of a disaster and resolving concerns over raw material supplies.

### Reinforcing Measures to Mitigate Disaster Risk

The Great East Japan Earthquake damaged several of the DIC Group's business sites, with restoration in some cases a timeconsuming process. One outcome from this experience was that it pushed DIC to revise emergency procedures to ensure that the Group's ability to respond effectively in the event not only of an earthquake but also of a major accident or a pandemic. To this end, DIC is reinforcing its contingency plans by upgrading various tools and systems. One example is a system that enables DIC to quickly and efficiently confirm the safety of individual employees.

This system was originally deployed in 2007, primarily at DIC's headquarters in Tokyo. Use of the system has since expanded steadily to Group companies, augmenting regular emergency drills and enhancing the speed and accuracy of response capabilities, including personnel safety checks, in the immediate aftermath of a disaster.

VOICE from the DIC Group

#### We are promoting application of the PDCA cycle through solid collaboration between departments.

I work in the Liquid Compounds Product Division, which manufactures products that apply key basic DIC technologies and are developed to address the needs of customers for, among others, coloring capability and adhesive performance. With the aim of contributing to society through our business activities, we promote ongoing efforts to differentiate and add value to our products. From the perspective of risk management, customers increasingly seek effective responses to the need for effective BCM. To foster BCM organically within DIC, I worked with relevant technical, production and sales departments to prepare lists for core products that include specific response measures. These lists are held jointly by all pertinent departments and the plan–do–check–act (PDCA) cycle is used to promote continuous improvement.



General Manager, Liquid Compounds Product Div. Shoichi Saegusa

## Initiatives to Ensure Information Security

WEB http://www.dic-global.com/en/csr/philosophy/management/security.html

### Basic Approach to Information Security

The DIC Group has positioned information security as a key management priority and established its Basic Policy on Information Security, which is founded on its recognition that protecting information assets that belong to or are managed by the DIC Group is essential to its ability to conduct business.

In line with by this policy, the DIC Group has formulated management regulations for confidential information, information management guidelines and individual guidelines. These were prepared to ensure that each director and employee fully understands the importance of information assets, manages them responsibly and uses them effectively. DIC will strive to further improvements by conducting internal audits and confirming current issues.

## Promoting Information Security

In fiscal year 2013, DIC prepared the English- and Chinese-language versions of its confidential information management regulations for

use in the Asia–Pacific region and Greater China in cooperation with regional administrative companies with the aim of formalizing information security systems at local Group companies. In fiscal year 2014, DIC will provide support for efforts to establish regulations and guidelines as part of an overall initiative aimed at further strengthening the information security responsiveness of overseas DIC Group companies. DIC will strive to optimize the management of information by planning and issuing a global security policy and related guidelines.

## Reinforcing Information Security

DIC will replace its existing firewall and quarantine system and launch a next-generation firewall to shield its system from targeted cyber attacks. Concurrently, DIC is implementing a new quarantine system to enhance the security of IT devices connected to its internal network, DIC-NET.

### **Topic** DIC Earns Japan Institute of Information Technology Award

The Japan Institute of Information Technology (JIIT) recently awarded DIC an IT Management Award for fiscal year 2013, in recognition of its move to absorb its information systems subsidiary with the aim of ensuring effective IT governance. DIC accepted the award at JIIT's 2014 IT Management Conference, which was held February 6–7, 2014. A representative of DIC also gave a lecture at the conference.

In Japan, it is common for companies to use information systems subsidiaries to create IT systems. The downside of this is that many companies that have spun their IT systems development departments off as affiliates now face a challenge in implementing effective IT governance groupwide. Acknowledging that realizing effective IT governance would require elevating the position of information systems operations within corporate management, DIC took the decision to absorb its information systems subsidiary and refocus resources on systems planning and engineering. The IT Management Award was in recognition of these efforts.



#### Notes:

 The Japan Institute of Information Technology (JIIT) is a public interest association established in July 1981 that conducts R&D on corporate applications of IT, as well as disseminates and promotes the practical implementation of its findings.

2. JIIT sponsors the Information Technology Awards (named the OA Awards until 2000), which recognize companies, institutions, operations, divisions and individuals for outstanding efforts and results in using IT to revamp operations. One of these is the IT Management Award, given to entities that have leveraged IT as an innovation tool to effect management transformation or achieve a dramatic increase in productivity.

#### **Core and Category-Specific Themes**

# Toward the Achievement of a Sustainable Society

WEB http://www.dic-global.com/en/csr/environment/

## Promoting Responsible Care

#### Basic Philosophy

As a company that handles chemical substances, DIC sets standardized safety regulations for ESH initiatives. The Company is working to exceed regulatory standards and fully disclose results.

DIC established its Principle and Policy for the Environment, Safety and Health in 1992 and in 1995 pledged to implement the precepts of Responsible Care. Since reaffirming its support for Responsible Care management in January 2006 by signing the CEO's Declaration of Support for the Responsible Care Global Charter, the Company has promoted constant improvements. In 2014, DIC renamed its Principle and Policy for the Environment, Safety and Health the Core Policy for the Environment, Safety and Health.

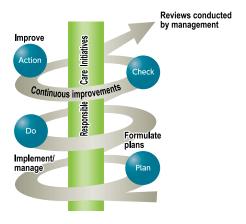
#### Core Policy for the Environment, Safety and Health

As a responsible corporate citizen, and as a company that manufactures and sells chemical substances, DIC recognizes that care for the environment, safety and health is fundamental to the management of the Company.

DIC is committed to the concept of sustainable development in all aspects of its businesses and contributes to the global environment, including biodiversity, by creating environmentally sound products and technologies.

- We take responsibility for the environmental, safety and health implications of products throughout their life cycles.
- We continuously set goals and targets for environmental, safety and health improvements.
- We comply strictly with laws, regulations and agreements relative to safety, the environment and health. For countries lacking such laws, we prioritize safe operations and protection of the environment.
- We systematically provide education and training on the environment, safety and health.
- We prepare systems and audit internally to benefit the environment, safety and health.

We disclose these policies internally and externally and ask that all DIC Group companies observe them. The abovementioned "safety" also encompasses security and disaster prevention.



#### Annual Policy

The DIC Group sets an annual policy for Responsible Care initiatives, which it also translates into English and Chinese to facilitate dissemination and encourage initiatives Groupwide. The Group has also developed a slogan to guide these initiatives: "Working to create a safe global environment through Responsible Care initiatives that facilitate personal growth for each individual employee." In line with this slogan, the Group pledges to pursue corporate activities that contribute to the preservation and enhancement of society and the environment.

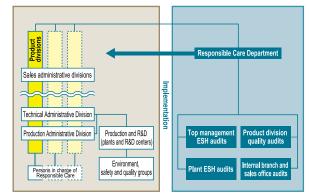
#### Policy for 2014 Responsible Care Initiatives

- Promote Responsible Care activities across the global network of DIC Corporation.
- Establish a safety culture oriented toward "zero accidents."
- Set targets to reduce environmental impact through business activities and openly report performance and achievements.
- Manage chemical substance information in an appropriate manner and provide it to customers and to be used in DIC Group activities.

#### Framework for Promoting Responsible Care

Each year, DIC identifies priority issues to be addressed and promotes use of the PDCA cycle for each Group business-, company-, plant- or R&D facility-driven initiative. While striving on various fronts to ensure that initiatives progress well, the Responsible Care Department conducts regular audits to maintain compliance and improve/upgrade environmental, safety and quality standards.

#### Framework for Promoting Responsible Care



Responsible Care implementation framework

Responsible Care auditing framework

#### Support for Group Company Initiatives

The Responsible Care Department provides a wide range of support for both domestic and overseas DIC Group companies, regardless of size, with the aim of enhancing Responsible Care initiatives Groupwide.

#### Information Disclosure and Dialogue with Stakeholders

The DIC Group strives to increase the transparency of its activities through the active disclosure of information while at the same time promoting dialogue with stakeholders by, among others, presenting safety- and environment-related data on the DIC website, in reports and through other media. The Group also undertakes initiatives aimed at promoting communication with society, including through community meetings.

#### **Responsible Care Auditing**

#### Basic Approach

Responsible Care Department specialists with expertise, experience and auditing capabilities regularly visit DIC Group companies to assess the status of Responsible Care initiatives. In addition, top management ESH audits, which include participation by DIC's President and CEO, as well as by senior executives and executive officers, are conducted at multiple sites each year with the aim of enhancing Responsible Care performance levels across the domestic DIC Group.

Overseas, Responsible Care Department specialists and regional Responsible Care officers assess the progress of efforts at production sites and work together to enhance the effectiveness of Responsible Care initiatives.



### Occupational Safety and Health

#### Prioritizing Safe Operations

DIC recognizes that operational safety is fundamental to its operations, as well as a core component of Responsible Care. Accordingly, the Company undertakes occupational safety and health, security, and disaster prevention measures to foster a "safety first" philosophy Groupwide and in the mind of every employee.

Because its manufacturing operations span diverse fields, DIC has numerous production processes that use hazardous and toxic materials and rotating devices, including ones that do not involve chemical reactions. Any accident involving such materials or devices has the potential to significantly impact society in general and damage the health of DIC and partner company employees and of local residents.

With the aim of preventing such accidents, DIC places a high priority on reducing risks in the workplace by reinforcing awareness of *Principles of Safe Conduct* and training safety personnel. Through efforts to reinforce the Group's safety infrastructure and create a safety-oriented corporate culture, DIC strives to enhance safety Groupwide.

#### Basic Philosophy

As a responsible member of society and a manufacturer that sells chemical substances, the DIC Group recognizes that proper consideration for ESH is fundamental to its operations and works to incorporate this awareness into all of its business activities.

Guided by this philosophy, the DIC Group analyzes accidents and communicates information thus derived, based on which it undertakes risk assessment in order to protect occupational safety and health.



#### 1) DIC's President and CEO Appears in Posters Promoting Principles of Safe Workplace Conduct

DIC's President and CEO appeared in posters highlighting the importance of safe workplace conduct, underscoring DIC's commitment to reinforcing its safety infrastructure and creating a culture of safety. These posters were prepared in three languages (Japanese, English and Chinese) and hung at production sites and offices in all countries and territories where the DIC Group has operations.

(Above) DIC President and CEO Yoshiyuki Nakanishi participates in a top management ESH audit (Below) Audit at Shanghai DIC Ink Co., Ltd.







Safety posters featuring DIC President and CEO Yoshiyuki Nakanishi

#### 2) Risk Reductions

By understanding potential risks in production processes, facilities and devices, and the hazards of chemical substances, DIC systematically also prepared initiatives to prevent accidents and occupational injuries. DIC creates risk assessment guidelines when deploying new or modified equipment or changing production processes, informs business sites about its guidelines and conducts training workshops.

#### 3) Training Skilled Safety Personnel to Predict Risks

DIC regularly educates skilled safety personnel on how to handle chemical substances, using materials such as its Principles of Safe Conduct and Environment and Safety Guidelines for the R&D Department, as well as safety data sheets (SDSs) and Occupational Accident Case Studies. In recent years, DIC has focused especially on a risk prediction training technique called Kiken Yochi Training (KYT) ("hazard prediction training") and on hands-on safety training among Group companies in many regions.

#### 4) Promoting Hands-On Safety Training

Hands-on safety training is an effective alternative to classroom-based learning that uses actual equipment to simulate potential risks in the workplace, thereby heightening employees' awareness of the importance of proper safety. In fiscal year 2013, DIC added five new categories of hands-on training that use three types of equipment to the program, which is currently a mobile initiative that travels from site to site. In fiscal year 2014, DIC intends to reinforce the program by setting up the Saitama Hands-on Safety Training Center on a site adjacent to its Saitama Plant.

The Group recently began deploying similar hands-on safety training in Greater China and the Asia-Pacific region.



Number of Hands-On Safety Training Participants in Fiscal Year 2013

DIC	DIC Group (Japan)	DIC Group (including overseas operations)
1,571 (9 sites)	2,749 (30 sites)	3,335 (33 sites)

#### Status of Occupational Accidents

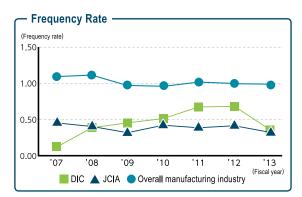
In 2013, the number of occupational accidents at DIC and DIC Group companies in Japan declined, although the DART rate\* for the global DIC Group increased. Since fiscal year 2008, the Group has deployed the DART rate, a common indicator used in various countries, to bolster safety activities.

\* DART rate: DART = NEH x 200,000 N = total days away from work. EH = total annual hours worked by all employees. The 200,000 hours in the formula represents the equivalent of 100 employees working 40 hours per week for 50 weeks per year.

	(Numbers in parentheses are for fiscal year 2012)		
	DIC	DIC Group (Japan)	DIC Group (including overseas operations)
Number of lost workdays	2 (3)	6 (7)	33 (38)
Frequency rate	0.338 (0.678)	0.622 (0.629)	_
Severity rate	0.001 (0.033)	0.018 (0.025)	_
DART rate	3.5 (9.0)	16 (8.6)	17.8 (7.7)

Days Off Work Due to Occupational Accidents in 2013

Note: Data for 2013 is for January-December





#### Safe Corporate Climate Cultivation Working Groups

Safe Corporate Climate Cultivation Working Groups comprise personnel in charge of safety at plants belonging to DIC and subsidiary DIC Graphics Corporation. These groups have been active since fiscal year 2010. Members meet regularly to discuss and exchange proposals regarding safety policies and measures.

In fiscal year 2013, the working groups prepared safety posters and proposed the reading out of key passages from Principles of Safe Conduct in the workplace as a measure to enhance employee awareness.

### Security and Disaster Prevention

#### Basic Philosophy and Organization

Any fire, explosion or leak of hazardous substances from a chemical plant could have a tremendous impact on local residents and the rest of the community and damage the health of employees, including those of partner companies.

In addition to establishing a security management system to prevent such accidents, the DIC Group operates and maintains its facilities in line with pertinent laws and regulations. The Group regularly conducts emergency drills and has earthquake and other response measures in place.

DIC also undertakes risk assessments to ensure its ability to construct safe production facilities. In 2013, the Group formulated the DIC Process Risk Management (PRM) Guidelines\*1, which consist of four assessment techniques and implementation timetables for each. The Group uses these tools to conduct regular risk assessments at each of its sites.

\*1 The DIC PRM Guidelines outline timetables and implementation frameworks for assessing the handling of chemical substances, production processes, production formulas, machinery and work practices with the aim of comprehensively identifying and steadily reducing risks associated with production and R&D processes.

#### Facility Safety Assessments

#### 1) Evaluation of Safety

DIC Group production facilities have a vast array of equipment, ranging from chemical reaction plants to machine presses and other processing equipment. When modifying processes or upgrading/replacing equipment, safety is assessed at every stage from process design and construction through to operation, maintenance and final disposal, in line with risk assessment guidelines for reaction processes and for equipment and facilities, to ensure higher safety levels for new processes and facilities.

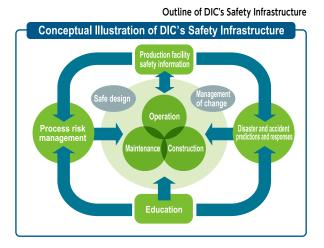
#### 2) Accident and Disaster Analysis and Timely Information

DIC collects and compiles information on internal and external accidents, disasters and problems into its Occupational Accident Case Studies and Accident Case Studies databases. After identifying the causes of accidents or problems and establishing points to be checked, the Company incorporates database information into safety education for DIC and DIC Group companies in Japan and overseas.

#### 3) Initiatives to Enhance Safety Competency

A company's ability to enhance safety competency can be defined as its ability to maintain safety levels at its various sites. DIC's safety assessment system encompasses questions about safety infrastructure (technical considerations) and the Company's culture of safety (operation and management of organizational culture). DIC introduced its safety assessment system in fiscal year 2013 with the goal of objectively evaluating and enhancing its safety capabilities. This system was developed by the Japan Society for Safety Engineering, a common benchmark for engineers in the petrochemicals industry. The system is currently used by the 19 major corporations in Japan that collaborated to establish the Japan Safety Competency Center.

In fiscal year 2013, DIC tested the system at three plants, feeding back the results of voluntary assessments of safety infrastructure and safety culture to Group sites. In fiscal year 2014, DIC plans to evaluate one plant after renewing its assessment system, and will consider further expanding its use.



#### Implementing Emergency Response Drills

DIC augments daily security patrols and periodic equipment checks with regular emergency response drills, especially at production sites in Japan and overseas, to prepare for emergency situations.



Training in the use of fire extinguishers Firefighting skills

In-house firefighting squad drill

### Safety Management in Logistics

#### Initiatives in Fiscal Year 2013

To handle emergencies during transport, DIC requires transport personnel to carry Yellow Cards<sup>\*2</sup>. When transporting our products, we use containers that comply with the Fire Service Act and other transportation laws and with UN standards.

\*2 Yellow Cards are part of activities recommended by the Japan Chemical Industry Association (JCIA). The cards contain information about the right actions to take if accidents occur and provides contact details to ensure proper responses of transportation operators, firefighters and police officers if accidents occur when transporting chemical substances. Transportation personnel must carry these cards at all times.

### Safeguarding the Environment

### Preventing Global Warming

#### Basic Philosophy

In light of public expectations regarding the implementation of measures to help prevent global warming, DIC has included initiatives aimed at reducing greenhouse gas emissions from its production facilities within its overall sustainability policy. The Company is currently implementing a variety of initiatives to reduce its consumption of energy—and its emissions of CO<sub>2</sub>—as outlined below, as well as promoting the active disclosure of related data.

- 1 Undertake energy-saving initiatives Groupwide.
- 2 Deploy effective measures through working group activities.
- ③ Operate energy-saving cogeneration systems (heat and power generating facilities).
- ④ Employ energy from renewable sources (biomass, wind and solar power) as appropriate at suitable sites.

In fiscal year 2013, DIC inaugurated conservation efforts at overseas DIC Group companies, which consume approximately 1.8 times more energy than domestic counterparts.

#### Framework for promoting Energy-Saving Initiatives

In Japan, DIC has established energy-saving promotion committees at each of its production and R&D facilities. Committee activities include confirming the progress of initiatives, engaging in discussions and conducting patrols. DIC has also set up an energy-saving working group with members chosen from each production facility.

The working group fosters the exchange of information, research pertaining to new items and the deployment of effective measures to reduce  $CO_2$  emissions. The Production Control Department provides international support from various perspectives. This includes the operation of management systems and human resource education, as well as independent initiatives in each country and region.

#### Principal Initiatives in Fiscal Year 2013

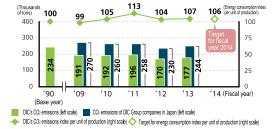
#### 1) Initiatives in Japan

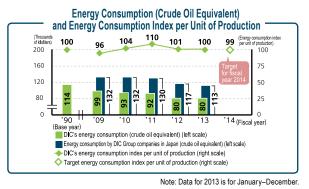
#### Energy Consumption and CO<sub>2</sub> Emissions

In fiscal year 2013, energy consumed by the DIC Group in Japan amounted to 113,500 kiloliters, calculated in kiloliters of crude oil, down 0.2 percentage point from fiscal year 2012, while energy consumption per unit of production declined 1.5%, reflecting the utilization of oil byproducts from production processes thanks to the recovery and use of waste heat, as well as to other initiatives. As a consequence, the Group attained its target for reducing domestic energy consumption for the period.

In Japan, the Group's CO<sub>2</sub> emissions in fiscal year 2013 increased 6.4% from the previous fiscal year, to 244,377 metric tons. A major factor behind this result was a jump in consumption of electric power, as the country's nuclear power generating facilities remained offline, increasing dependency on thermal power and pushing up the emissions factor for CO<sub>2</sub> emissions from the use of electric power. In fiscal year 2014, DIC looks to further cut CO<sub>2</sub> emissions by improving its energy efficiency.

CO2 Emissions and Energy Consumption Index per Unit of Production





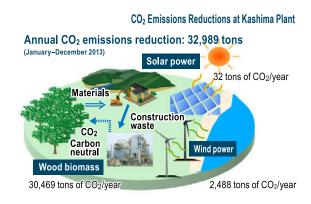
#### Promoting Energy-Saving Initiatives

## Saving the equivalent of 16,500 drums of oil through 396 energy-saving activity

Energy savings from activity at DIC Group production and R&D facilities in Japan in fiscal year 2013 were equivalent to 3,300 kiloliters of crude oil, or 16,500 200-liter drums of oil. This represented 2.9% of total energy consumption by domestic DIC Group companies throughout fiscal year 2012.

#### Using Renewable Energy Application and Cogeneration

In Japan, the DIC Group actively promotes the use energy from renewable sources (biomass, wind and solar power) at suitable sites. In fiscal year 2013, DIC dramatically improved the generating capacity of biomass boilers (2,000 kW and 20 tons of steam per hour) and wind power generation (4,600 kW). DIC built an 80-kilowatt solar power plant at the Kashima Plant in Ibaraki Prefecture, as a result of which renewable energy output increased 6.1% from fiscal year 2012. Renewable energy accounted for 7% of domestic DIC Group energy consumption. As a result, we reduced  $CO_2$  emissions by 32,989 metric tons in calendar 2013.



Indirect CO<sub>2</sub> Emissions in the Supply Chain (Scope 3) In fiscal year 2012, DIC reported indirect emissions in one category of Scope 3, "upstream transportation and distribution." In fiscal year 2013, the number of categories increased to six (including "capital goods" and "waste generated in operations").

#### 2) Initiatives Overseas

In fiscal year 2013, energy consumption by overseas DIC Group companies amounted to 208,700 kiloliters, equivalent to 700 kiloliters of crude oil (up 15% from fiscal year 2012). CO<sub>2</sub> emissions were 478,579 tons (up 16% from fiscal year 2012). The increases reflected the addition of production companies in the Asia–Pacific region as a result of acquisitions.

While laws and regulations on infrastructure differ between countries and regions, DIC strives to save energy and conduct efficient operations wherever it is active and to set precedents for the chemical industry. In fiscal year 2013, the Company implemented 65 emissions reduction initiatives overseas. These initiatives achieved reductions in annual energy consumption of 2,229 kiloliters (equivalent to 1.2% of overseas energy consumption in fiscal year 2012) and in CO<sub>2</sub> emissions of 5,018 tons (equivalent to 1.2% of overseas CO<sub>2</sub> emissions in fiscal year 2012).

#### Fiscal Year 2013 Energy Savings of Overseas DIC Group Companies

Region	Number of initiatives	Energy consumption reductions (kl/year)	CO <sub>2</sub> emissions reductions (tons of CO <sub>2</sub> /year)
PRC	20	1,292	2,941
Asia-Pacific	37	597	1,362
Others	8	340	715

#### 3) External Assessments

DIC has been reporting to the Carbon Disclosure Project (CDP) since 2010. The CDP requests disclosure regarding corporate activities and environmental information relating to climate change. The CDP has recognized DIC's consistent environmental initiatives, increasing its performance and disclosure scores for an overall score of 88B.

# Reducing Emissions of Chemicals into the Environment

#### Basic Philosophy

Because chemicals companies handle a considerably greater volume and more diverse range of chemical substances than companies in other industries, they must be extremely vigilant in handling to prevent discharges of such substances into the environment.

DIC and DIC Group companies in Japan have worked to reduce emissions into the air, water and soil of substances designated under the Pollutant Release and Transfer Register (PRTR) since fiscal year 2000 and of substances targeted for study under a voluntary scheme created by the Japan Chemical Industry Association (JCIA) since fiscal year 2005.

In fiscal year 2013, DIC introduced management by objectives (MBO) at DIC Group companies in the PRC and the Asia–Pacific region with the aim of further encouraging emissions reductions.

Environmental Emissions of Substances	Targeted for Study (567 substances,
including PRTR-designated substances	and one substance group)

icluding PRTR-designated substances, and one substance group)				
DIC Emissions into the air 261 tons Emissions into water 10 tons Emissions into soil 0 tons	271 tons	Decrease of 8% (25 tons) from fiscal year 2012		
DIC Group (Japan) Emissions into the air 456 tons Emissions into water 10 tons Emissions into soil 0 tons	466 tons	Decrease of 18% (101 tons) from fiscal year 2012		

#### Principal Initiatives in Fiscal Year 2013

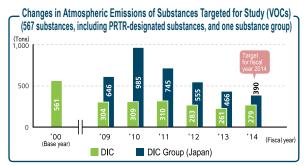
In fiscal year 2013, the DIC Group's principal initiatives focused on 462 PRTR-designated class-1 chemical substances and 105 chemical substances (excluding class-1 substances) and one substance group—chain hydrocarbons with 4 to 8 carbons targeted for study by the JCIA. During the period, DIC and DIC Group companies in Japan used and/or produced 93 substances in the first category and 108 substances in the second category in amounts exceeding 1.0 ton. DIC Group companies in Japan met their emissions targets through thorough effective management of facilities, including VOC combustion facilities.

Overseas, DIC Group companies studied emissions of targeted substances and reported findings to regulators in line with pertinent national and regional regulations. In fiscal year 2013, DIC Group companies in the PRC and the Asia–Pacific region introduced MBO using pertinent national targets and guidelines, thereby reinforcing their commitment to such efforts. DIC will continue working to attain both facility and operational reductions targets.

#### Reducing Environmental Impact on the Air, Water and Soil

#### 1) Addressing VOC Regulations

Having succeeded in achieving a voluntary target—set in fiscal year 2007—of reducing atmospheric VOC emissions 30% by fiscal year 2010 (using fiscal year 2000 as the base year) for the DIC Group in Japan, domestic Group continue to pursue steady annual reductions through facility improvements and emissions management.



Note: Data for 2013 is for January-December.

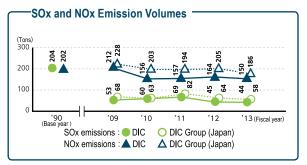
## 2) Soil and Groundwater Pollution Studies

In Japan, the DIC Group strictly observes the Soil Contamination Countermeasures Act, Water Pollution Control Act and other relevant laws. The Group implements soil and groundwater surveys and countermeasures as necessary and assesses environmental and safety-related risks.

## 3) Reducing SOx, NOx and COD

Taking fiscal year 1990 as the base year, DIC Group companies in Japan have worked to reduce sulfur oxide (SOx) and nitrogen oxide (NOx) emissions from boilers.

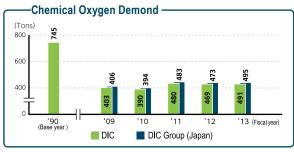
These are a key cause of acid rain. The DIC Group is also achieving steady results in the reduction of chemical oxygen demand (COD), an indicator of water quality deterioration in wastewater.



Note: Data for 2013 is for January-December.

## 4) Compliance with Regulations for Dioxin Emissions

In Japan, the DIC Group currently has incinerators and other such equipment at six facilities. Continuous efforts to reduce emissions levels have enabled the Group to achieve results that greatly surpass standards specified in the Law Concerning Special Measures Against Dioxins.



Note: Data for 2013 is for January-December

## Reducing Industrial Waste

#### **Basic Approach**

The DIC Group aims to minimize industrial waste by recycling and reusing materials. Since fiscal year 2001, DIC has been involved in a zero-emissions initiative aimed at reducing industrial waste disposed of as landfill.

DIC has deployed zero-emissions initiatives at DIC Group companies in Japan since fiscal year 2008. With the aim of expanding efforts across the global DIC Group, in fiscal year 2013 DIC began to introduce MBO at overseas Group companies.

DIC subcontracts the treatment of industrial waste to be disposed of as landfill. The Company ensures waste is properly treated by promoting strict compliance and on-site confirmation by designated departments at each of its production facilities.

## Topic Advanced Initiatives in the PRC Earn DIC Green Enterprise Certification

The PRC is reinforcing regulations pertaining to chemical substances with the aim of balancing economic growth and environmental protection. It is against that backdrop that 20 DIC Group companies in the PRC have promoted improvements in their own practices for handling chemical substances based on the Group's environmental management system to reduce chemical substance emissions, water intake and discharge, waste disposal and energy consumption and have submitted data annually to the relevant authorities.

These highly transparent initiatives have garnered considerable praise. In June 2012, Nantong DIC Color Co., Ltd., which manufactures organic pigments and printing inks, was certified as a Green Enterprise by the Nantong City Environmental Protection Committee, a designation recognizing companies with environment-friendly business practices. As a consequence, Nantong DIC Color is now seen as a model chemicals plant.

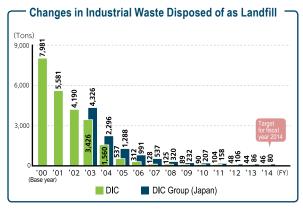


Green Enterprise certificate

## Principal Initiatives in Fiscal Year 2013

## Using the ETSITE Responsible Care Data Management System

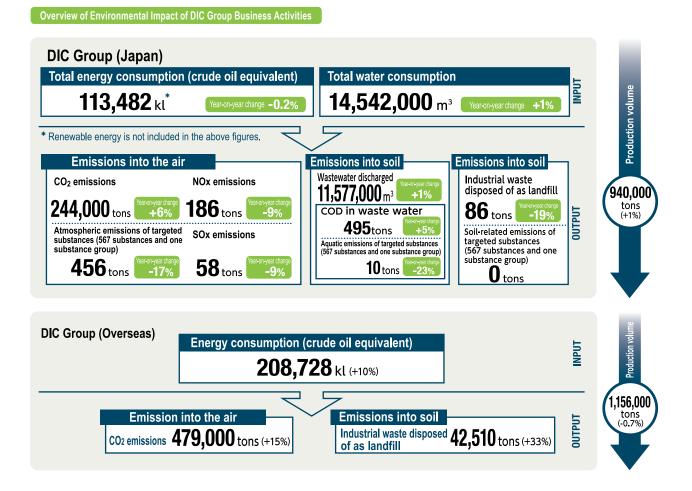
In fiscal year 2012, the DIC Group in Japan introduced a Responsible Care data management system called ETSITE to ensure rational management and effective usage of management data for industrial waste. ETSITE is an Excel-based data management system that provides information on companies that dispose of industrial waste, looking at their disposal routes and flows, and reports to Japan's prefectural governments. In fiscal year 2013, the ETSITE system helped DIC improve the efficiency of various practices and of progress management.



Note: Data for 2013 is for January-December.

## **Reducing Disposal of Industrial Waste as Landfill**

In fiscal year 2013, DIC worked to reduce the disposal of industrial waste as landfill by recycling cinders, dust and sludge, among others, into cement and other resources. As a result, the total volume of waste disposed of as landfill for the DIC Group in Japan in fiscal year 2013 was 19.3% lower than in the previous fiscal year.



## **Product Chemical Substance Management**

## Promoting Chemical Substance and Product Safety

#### Basic Approach and Implementation Framework

In 2003, the UN Economic Commission for Europe issued the first edition of the Globally Harmonized System of Classification and Labeling of Chemicals (GHS), the idea behind which was to reduce hazards through an internationally harmonized approach to classification of chemicals by type and toxicity, the clear display of information on labels for better understanding and the provision of safety data sheets (SDSs).

To respond swiftly to requests to reduce risks by providing customers with complete information on hazardous substances, DIC introduced the CIRIUS (Chemical Substance Information Comprehensive Management System) for domestic products in 2009. CIRIUS centralizes the management of raw materials and information to facilitate the provision of reliable SDSs. The system automatically checks various laws and regulations, including security export control rules; the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc; the Industrial Safety and Health Act and the Poisonous and Deleterious Substances Control Act. In 2013, DIC began using the Wercs (a global SDS/label creation system developed with know-how from DIC) for products for export.



DIC now has a structure that enables it to compile SDSs for over 250,000 products that comply with national and regional laws and regulations and is accessible in all local languages. In April 2014, DIC began using the Wercs to issue SDSs and labels for all exported products.

## Collecting, Analyzing and Communicating the Latest Information

DIC collects the latest information on chemical substances through international consultants and experts, news wire services and chemicals industry associations to ensure its ability to respond swiftly and effectively to revisions in laws and regulations.

In fiscal year 2013, DIC switched to using Wercs for the creation of SDSs and labels for existing products for export.

In response to the May 2013 announcement by authorities in the ROK regarding the introduction of the Act on the Registration and Evaluation of Chemicals (K-REACH), DIC is currently analyzing information and taking steps to prepare for implementation in 2015.

#### Training in Chemical Substance Management

DIC endeavors to improve employee awareness and knowledge of chemical substance regulations in Japan and abroad. This includes providing specialized training for individuals involved in exporting chemical substances in line with the Foreign Exchange and Foreign Trade Act, and for individuals involved in importing substances in line with the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc; the Industrial Safety and Health Act and the Poisonous and Deleterious Substances Control Act, among others.

DIC only licenses employees who have completed designated training and passed in-house examinations. Licenses permit these individuals to engage in import and export operations. To renew their licenses, they must retake classes and pass the subsequent exams. As of March 31, 2014, 1,272 employees held export licenses and 224 employees held import licenses.

Topic

## **Global Warming Prevention Initiatives in the PRC**

In November 2013, the energy officers of 16 sites in the PRC gathered to report on the results of global warming prevention initiatives in 2013. They confirmed the progress of energy-saving plans and discussed useful deployments. Authorities in the PRC are encouraging companies to switch from light oil to a town gas that is an active biodiesel refined from vegetable matter. Shanghai DIC Ink Co., Ltd., which manufactures printing inks in Shanghai, started using biodiesel in 2013. The company plans to replace 90% of its boiler fuel with biodiesel in fiscal year 2014.



Energy management conference in Changzhou

## Supporting the Activities of DIC Group Companies Worldwide

To promote Responsible Care activities globally, DIC is providing leadership to assist a variety of initiatives by Group companies worldwide. DIC also confirms the progress of initiatives by conducting Responsible Care audits and sharing information by identifying new issues and areas in need of improvement. DIC focuses particularly on its 20 sites in Greater China and 17 sites in the Asia–Pacific region with the aim of facilitating the eventual establishment of independent management systems, emphasizing the importance of:

- 1. Building a culture of safety through hands-on training
- 2. Improving the skills of operators at each site
- 3. Providing information on safety measures for production equipment
- 4. Reinforcing management of hazards (static electricity, rotating
- machinery and chemical substances).

In line with efforts to drive activities, local safety officers in the PRC gathered at Nantong DIC Color Co., Ltd., in Nantong, Jiangsu Province, in March 2013 to report on progress at their companies and participate in risk prediction and hands-on safety training. In the Asia–Pacific region, safety officers from relevant companies gathered for a safety conference in Penang, Malaysia in February 2014 to confirm the progress of initiatives, share up-to-the-minute safety information and exchange opinions.

In fiscal year 2012, DIC began selecting sites with equipment and operations similar to its sites in Greater China and the Asia–Pacific region from its Occupational Accident Case Studies and Accident Case Studies databases in Japan and preparing English- and Chinese-language translations of case study descriptions to use in training designed to prevent accidents. In addition, employees in Greater China and the Asia–Pacific region have voluntarily translated *Principles of Safe Conduct* into English, Chinese, Korean and Malay.

To date, the Sun Chemical Group, which focuses on the European and U.S. markets, has pursued independent safety and environmental improvement initiatives. In fiscal year 2013, DIC and Sun Chemical began sharing information and resolved to promote more effective improvements with the goal of facilitating the creation of common target benchmarks for the global DIC Group in fiscal year 2015.

## Topic 1

## Asia–Pacific DIC Safety Officers Conference Held

Asia–Pacific region safety officers meet biannually for a conference aimed at supporting initiatives among DIC Group companies in the region. In February 2014, 24 representatives from 16 companies, including from Japan, gathered at DIC Compounds (Malaysia) Sdn. Bhd. in Penang.

The gathering featured reports on accidents within the DIC Group in fiscal year 2013 and progress on safety initiatives, as well as a discussion on ways to deploy effective safety measures at individual sites. There were reports from all participating Group companies on their own safety results and management system deployment. Participating officers also presented safety initiative case studies and exchanged opinions about enhancing the effectiveness of safety training and education and about environmental protection activities. Safety officers at the conference thereafter attended a hands-on training session led by DIC Compounds (Malaysia)'s safety officers. The meeting proved so valuable for sharing information that many participants indicated that they would like the gathering to be held annually instead of every two years.



Attending DIC Compounds (Malaysia)'s hands-on training session

**VOICE** from the DIC Group

## We are providing multifaceted support for Responsible Care Activities at each DIC site in Greater China.



I am responsible for providing support for the Responsible Care efforts of 20 DIC Group companies in the PRC, as well as in Taiwan. The PRC has capitalized on recent major events such as the 2008 Beijing Olympics and the 2010 Shanghai World Expo to raise the bar for safety and environmental laws and regulations. Regional governments have now started to implement their own regulations. While keeping tabs on such moves, I am striving to improve my skills so that I am able to advise and instruct sites handling different chemical substances and products and help to enhance their Responsible Care initiatives.

Special Advisor, EHS Special Advisory Coordinator, DIC (China) Co., Ltd. Dr. Fengqi Chen

## Topic 2

## Qingdao City Honors Qingdao DIC Finechemicals for Safety Excellence

In January 2014, the Qingdao People's Government recognized Qingdao DIC Finechemicals Co., Ltd., for firefighting and safety excellence. The city government, which has recently reinforced local firefighting and safety capabilities following an accidental explosion, praised the site's daily security and disaster prevention efforts, naming it a model company.



Citywide firefighting conference

## **Topic 3**

## Sun Chemical Group ESH Initiatives

# Sun Chemical Group and DIC Enhance Collaboration

The Sun Chemical Group, which oversees DIC Group businesses in Europe and North America, works tirelessly to promote ESH initiatives to support its dynamic business activities.

In fiscal year 2013, Sun Chemical began stepping up collaboration with DIC on initiatives aimed at contributing to global sustainability.



ESH conference in Parsippany, New Jersey, U.S., in February 2014

## New Web-Based Data Collection System Developed

Since 2005, Sun Chemical has collected data for key sustainability metrics using a spreadsheet-based



EcoTrack screen

reporting system. To further enhance the quality of reporting, Sun Chemical recently developed a new internal Webbased data collecting system called EcoTrack. Rolled out in 2013, EcoTrack enables continuous monitoring, gives more transparency and improves data quality check capabilities. It will be a key tool moving forward in Sun Chemical's road map objective to review target improvement opportunities. Historical data collected since 2005 will also be uploaded into the system to keep continuity in data reporting.

All of Sun Chemical's production sites will report into EcoTrack, raising the internal standard for sustainability key metrics tracking, improving quality and enabling continuous monitoring throughout the year.

## Solar Panels Installed in Wavre, Belgium

Sun Chemical has implemented a solar panel production system in Wavre, Belgium, with a total installed capacity of 203 kWp. The solar panels, which have been positioned on the roof of the main building and on an adjacent parking lot, are expected to generate a total of 175 MWh of renewable energy annually. More than 50% of this renewable energy will be consumed inside the plant, while the excess will be sold to the grid to benefit other energy users. Solar panel-based electrical power production at Sun Chemical's Wavre facility will thus allow for greater reliance on renewable energy resources.



Solar panels in Wavre, Belgium

## Quality Management (Customer Satisfaction)

## Working to Enhance Quality Management and Customer Satisfaction

#### Basic Approach

Along with its Core Policy for the Environment, Safety and Health, the DIC Group views the improvement of quality as a theme that is essential to upholding a sound operating foundation. Accordingly, the Group seeks to ensure every employee shares the sentiment conveyed in its Quality Policy and works continuously to enhance quality and ensure customer satisfaction.

## **DIC's Quality Policy**

"Contribute to the prosperity of customers and society by consistently providing reliable products."

## 1) Initiatives Aimed at Increasing Customer Satisfaction

## Quality Management System

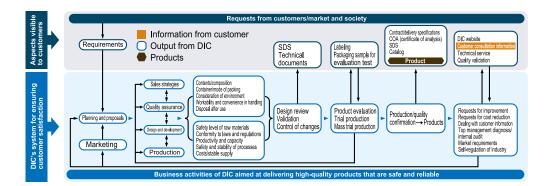
To better leverage its agility and comprehensive capabilities, in April 2012 DIC realigned its overall quality management system (QMS), establishing a matrix-type organization that positions product divisions on the vertical axis and sales administrative divisions, the Production Administrative Division and the Technical Administrative Division on the horizontal axis. In line with this change, the Group introduced a QMS based on ISO 9001, the International Organization for Standardization's standard for such systems, and subsequently earned ISO 9001 certification for all of its production facilities. The Group capitalizes on this QMS and on

its overall system to promote ongoing efforts to enhance quality.

The DIC Group also uses periodic quality audits to promote quality improvements. By sharing customer feedback and other information within its matrix-like quality management organization, and promoting close cooperation among product divisions, the Group works tirelessly to achieve customer satisfaction.



Close cooperation among relevant divisions and departments from product planning through to shipment enables DIC to develop and manufacture products with high added value, while rigorous process and identification management ensure product quality. Meticulous risk evaluation is conducted at the design review stage to guarantee safety. Moreover, after products have been sold customer and market assessments are gathered and fed back to development departments to facilitate further quality improvements.



## 2) Redefining and Promoting Awareness of DIC's Distinctive Quality Management Systems

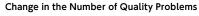
DIC has developed a distinctive QMS that focuses on constant quality improvements through ISO-based quality audits, launched in April 2012, and quality management assessment (QMA)-based quality initiatives conducted by product divisions. Recognizing that improving internal quality audit capabilities was crucial to raising the effectiveness of product divisions' quality improvement initiatives, DIC provides training designed to upgrade the skills of internal auditors. Beginning in fiscal year 2013, audits are also attended by internal auditors from other sites. Going forward, DIC will continue to focus on firmly establishing and promoting awareness of its QMS.

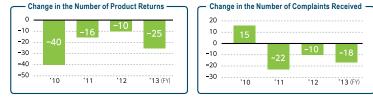
## 3) Preventing the recurrence of problems

Information on quality problems (complaints and criticisms) that arise is collated and analyzed and then shared across the Group to prevent recurrence. To discover the causes of such problems, the Group employs *naze-naze bunseki* ("why why analysis").

Naze-naze bunseki involves repeatedly asking "why" to encourage people to not jump to conclusions, but rather to investigate and identify actual root

causes, thereby making it possible to ensure problems do not recur. DIC also applies *naze-naze bunseki* in determining the causes of accidents, an approach that continues to yield solid results.







Group exercise using examples of actual accidents to analyze causes

# **Working to Enhance Job Satisfaction**

WEB http://www.dic-global.com/en/csr/stakeholder/staff.html

## Objectives of DIC's Human Resources Management System

With the aim of being a company where employees can fully exercise their abilities, DIC strives to support a healthy worklife balance and create a work environment conducive to job satisfaction. DIC also fosters local human resources in markets around the world, which it recognizes as essential to ensuring sustainable corporate growth.

## Respect for Human Rights

The DIC WAY Code of Business Conduct, which outlines standards DIC Group employees are expected to observe, lays down provisions prohibiting human rights violations and requiring respect for diversity, philosophies that are the foundation of the DIC Group's corporate activities. All DIC Group employees are obliged to provide written pledges to abide by The DIC WAY Code of Business Conduct and to conduct themselves as stipulated therein.

## Promoting Diversity

The DIC Group is working to create human resources systems that enable it to foster local employees of its affiliated companies around the world—people who will be crucial to the success of its current medium-term management plan—and to encourage opportunities for individuals based on business-related considerations, without regard for nationality. Having created a human resources system and introduced specialized training for the next generation of local senior management at Group companies in the PRC, DIC took similar steps for affiliates in Southeast Asia. DIC is also promoting the establishment of global human resources databases and the development of, among others, systematic training programs.

In Japan, DIC not only endorses global training for Japanese employees but also actively includes foreign nationals among new university graduates and mid-career candidates recruited.

## Expanding Career Opportunities for Women

DIC is implementing a variety of initiatives to promote career opportunities for women in line with its commitment to creating a work environment in which motivated employees can fully exercise their abilities. In addition to measures designed to transform the mindset of employees and the corporate culture of the DIC Group, the Group has undertaken various steps to heighten the drive and determination of female employees, including providing education aimed at enhancing awareness and broadening the range of jobs open to women. DIC also continues to offer specialized training for female employees that have been tapped for management positions and one-on-one training designed to expand job opportunities.

Thanks to these and other efforts, the number of female employees who have qualified as candidates for management positions continues to increase steadily. As well as increasing the number of female employees appointed to management positions, DIC will continue promoting initiatives focused on boosting the overall number of female employees in its labor force. As well, DIC continues working to boost the number of new female graduates it recruits from Japan's universities, a key source of talented human resources.

## Advancing the Employment of Individuals with Disabilities

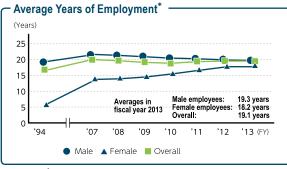
As of March 31, 2014, individuals with disabilities accounted for 2.22% of DIC's total labor force, exceeding Japan's legally mandated quota of 2.0%. Going forward, DIC will continue striving to exceed its legal obligation by creating a work environment that increases retention rates and by enhancing workplaces to ensure equal access for disabled employees.

## Encouraging Reemployment after Retirement

In addition to establishing a system that facilitates the reemployment of individuals up to 65 years of age, in compliance with the Law Concerning Stabilization of Employment of Older Persons, DIC works to secure reemployment opportunities through the use of work sharing. This framework ensures reemployed individuals are able to maximize their experience and make full use of their accumulated technological capabilities and specialized expertise.

# Initiatives that Support a Healthy Work–Life Balance

In 1986, DIC blazed a trail for chemicals manufacturers in Japan by implementing a childcare leave program. Since then, the Company has introduced a number of other systems and programs designed to assist employees balancing the demands of work and childcare, as well as introduced flexible working styles that make it easier for employees to make use of these systems, thereby ensuring that its overall Work and Childcare Balance Support Program, established in 2007, exceeds legal requirements. As a consequence, there is currently very little difference in the average years of employment for male and female employees.



\* Calculated based on the years of employment of individuals employed at the time.

Since 2002, DIC has also offered an option where regular employees can choose between career courses that either include or exclude transfers to other locations that would also require them to move house. In fiscal year 2012, the Company introduced a system that allows management-level employees to limit the locations to which they will accept transfers, making it possible for employees who are unable to accept transfers that involve relocating because of childbirth, childcare or nursing care responsibilities to effectively balance the responsibilities of their careers and their private lives.

#### - Number of Employees Using DIC's Childcare Leave System



#### Work and Childcare Balance Support Programs

Childcare Leave Program	The maximum length of leave is until the child reaches the age of 2 years and 6 months, which is one year longer than the legally mandated leave period.
Childcare While Working Program	This program encompasses two flexible working systems. One enables employees to shorten their daily working hours by up to three hours until the end of the child's third year of elementary school, while the other allows employees to stagger their working hours to accommodate childcare schedules.
Rules concerning returning to one's previous (or an equivalent) position	These rules specify that employees returning from childcare leave will return to their original position or an equivalent position.
Economic support system	This system enables employees on unpaid childcare leave to borrow a portion of their bonus in advance. Employees may also use this system to obtain an internal loan to cover major expenses for, among others, fertility treatments or the cost of daycare facilities for children, thereby relieving financial concerns.
Information sharing to promote program participation	DIC's views on support for work and childcare balance, as well as a guide to its various available systems and to make use of them, are posted on internal websites and the Company's intranet.

#### Acquisition of the Kurumin Mark



In fiscal year 2008, DIC was certified as a "Childcare Support Company" and accorded the Kurumin Mark, a mark of certification from Japan's Ministry of Health, Labour and Welfare (MHLW) in recognition of companies that actively promote initiatives that assist in raising the next generation of children.

## VOICE from the DIC Group

## Balancing a career and childcare is a challenge, but I feel happy and fulfilled.

When I first joined DIC as a salesperson, I was a bit taken aback by the attention given to the fact that I am a woman, but it was never uncomfortable in any way. The biggest test came after I became pregnant, had my baby and then returned to work after taking maternity leave and childcare leave. First, there were all the unexpected and bewildering changes that come with pregnancy. Then I was up to my ears looking after a new baby, a situation that was compounded by anxiousness about being away from work for so long. Since coming back to work, the limits of being a working mother have been a source of some pressure, but everyone in my department and family has been really encouraging. Balancing a career and childcare is certainly a challenge, but it's one I took on readily and I feel happy and fulfilled in both roles. I'm really grateful to have such support, and I will continue to do my very best both at work and at home.



Advanced Technology Marketing Dept. Naoko Nakajima

## Caring for Mental Health

Addressing mental health issues in the workplace is a challenge that has attracted increasing attention in recent years. DIC works to correct problems that have been shown to negatively affect psychological well-being, implementing measures to combat harassment and digitizing the management of work hours to prevent extreme overwork to ensure its labor management practices are in compliance with legal requirements. DIC has also established a mental health program under the direction of an in-house occupational health psychologist, under which it is promoting comprehensive efforts to address mental health care issues, including providing ongoing training to facilitate effective line care\* and equip employees with self-management skills, installing an internal help desk and providing access to outside counselors, and providing support to ensure a smooth return to work for employees taking leave.

\* Line-care training: Training for supervisors to help them recognize promptly when an employee is unwell and respond appropriately by, for example, recommending guidance or counseling or making workplace improvements.

## Securing and Fostering Human Resources

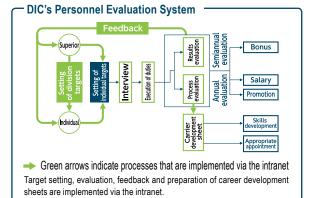
## Ability-Oriented Qualification System and Fair and Impartial Treatment

To enable all employees to fulfill their potential in jobs suited to their abilities, and to ensure that their efforts are reflected appropriately in their treatment, DIC has consolidated its numerous employee qualification systems irrespective of job classification and educational credentials. The selection of employees to recommend for gualification is done through screening based on objective standards, thereby guaranteeing equal opportunities for promotion to all motivated, capable employees. Personnel evaluation and remuneration systems designed to enhance job satisfaction ensure that abilities and achievements are assessed appropriately and reflected in a timely manner in their treatment. Of note, DIC has introduced management by objectives (MBO) into its personnel evaluation system, a goal-setting management tool that promotes both corporate growth and employee development. Results of individual evaluations are fed back in full to employees, including reasoning behind determinations, a transparent process that ensures employees are largely satisfied with evaluation results.

#### Training System

DIC's training system comprises programs in six categories: managementlevel training, global human resources development, level-specific training, department and job-specific training, on-the-job training and selfdevelopment. These programs are based on practical curricula and focus on enhancing workplace skills and accelerating change in line with business strategies. DIC is currently in the process of restructuring its departmentspecific training programs to create a framework that meets the requirements of departments and jobs. In fiscal year 2013, we systematically created a human resources development framework for sales departments and implemented training, having previously done the same for production and technical departments.

In the area of global human resources development, DIC continues to expand the number of trainees it sends from Japan to overseas Group companies. In fiscal year 2013, a total of 20 individuals were dispatched to eight countries and territories, including the United States, the PRC and Singapore. DIC also operates a reverse trainee program under which it welcomes trainees from overseas Group companies to Japan. These two programs together comprise a global personnel exchange system that enables DIC to foster global human resources with practical skills. DIC also offers the Global Challenge Program, which targets young employees in Japan, featuring a curriculum that encompasses not only language instruction but also training aimed at, among others, cultivating a global perspective, understanding other cultures and developing mental toughness.



**VOICE** from the DIC Group

## The experience you accumulate in your day-to-day work is the key to becoming someone who can function anywhere in the world.

I took part in the Global Challenge Program because I was looking for an opportunity to improve my English, which wasn't very good. It was a little naïve to think that "global" skills equaled language ability. I remember our instructor saying, "When you encounter another culture, can you accept and enjoy it or is your automatic reaction to reject it as 'foreign'?" Over the course of my career, I've met a wide range of people and as a result have had the opportunity to encounter a variety of different cultures. The Global Challenge Program taught me that it's important not to let your job take up all your energy. It's important to be interested in new things and willing to continue learning. I look forward to applying the practical global skills I've accumulated to continue growing in my career and to become someone who can function effectively anywhere in the world.



Dispersion Technical Div. 1 Azusa Yogo

# **Global Supply Chain Management**

WEB http://www.dic-global.com/en/csr/stakeholder/partner.html

## Basic Supply Chain Management Philosophy

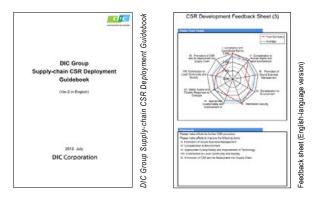
With the aim of fulfilling its responsibilities to society throughout its supply chain, from the production of intermediate materials to the sale of DIC Group products, the DIC Group has formulated the DIC Group CSR Procurement Guidelines. The Group promotes CSR procurement across the entire supply chain by ensuring that all suppliers understand and agree to abide by these guidelines.

## **DIC Group CSR Procurement Guidelines**

- 1. Compliance with laws and social norms
- 2. Respect for human rights and consideration for work environments
- 3. Safety and hygiene
- 4. Promotion of sound business management
- 5. Consideration for the environment
- 6. Information security
- 7. Appropriate quality and safety and improved technologies
- 8. Flexible attitude to ensure stable supplies and respond to change
- 9. Contribution to local communities and society
- 10. Promotion of CSR/deployment of CSR in the supply chain

## Promoting CSR Procurement

Since 2010, DIC has assessed the CSR procurement status of and provided feedback to more than 400 suppliers, acting in line with the *DIC Group Supply-chain CSR Deployment Guidebook*. In fiscal year 2013, we revised the guidebook, including a number of new items to be checked in relation to issues attracting increased concern in recent years, including biodiversity preservation and measures for dealing with conflict minerals, thereby expanding the scope of assessment. DIC currently produces Japanese-, Englishand Chinese-language versions of the guidebook. In fiscal year 2014, the Company will use the revised guidebook to once again assess the CSR procurement status of suppliers, including the newly added items, as well as to visit certain suppliers to conduct on-site inquiries, enabling it to confirm the progress of initiatives to promote CSR procurement, as well as to encourage awareness of related concerns.



## **Global Perspectives**

To broaden awareness of the DIC Group CSR Procurement Guidelines among suppliers, in 2013 DIC held CSR procurement briefings at Group companies in the PRC and began assessing the CSR procurement status of local suppliers. In Southeast Asia, where supplier assessments commenced in 2012, the Group provided feedback to suppliers outlining its findings and suggesting improvements.

The DIC Group continues to promote efforts to eliminate conflict minerals from its supply chain. The Group has completed traceability surveys worldwide regarding most commonly mined conflict minerals in both the production and the transport of materials it purchases from suppliers.

VOICE from the DIC Group

## DIC and its suppliers are working together to promote CSR procurement.

DIC provides a broad range of products that supply a diverse range of customer needs. Accordingly, we also require a wide variety of materials. In recent years, the number of overseas suppliers we use in overseas markets has grown, with a particularly large proportion of them located in the PRC. I have been in charge of CSR procurement since 2010. Since then, we have conducted assessments of and provided feedback to suppliers, in some cases visiting suppliers directly to conduct on-site inquires and exchange views, a process that has yielded valuable insights. With general understanding of CSR procurement having increased in Japan in recent years, our initiatives have succeeded in bolstering supplier awareness. Going forward, we will conduct CSR procurement assessments of our suppliers—including those in overseas markets—in line with version 2 of the *DIC Group Supply-chain CSR Deployment Guidebook*, which has been revised to include a number of sustainability-related items. Through these and other efforts, we will continue working to ensure our ability to provide stable supplies of environment-friendly, socially responsible products.



Manager in charge of CSR procurement, Purchasing and Logistics Div. Dai Tomisaki

# **Establishing a Solutions Business**

WEB http://www.dic-global.com/en/csr/stakeholder/customer/satisfaction.html

## Capitalizing on Changes in the **Needs of Society**

The DIC way of doing business starts with listening to what our customers say. The cornerstone of our approach is to swiftly grasp the concerns of our customers and, by identifying concerns shared by multiple customers, to gain insights into evolving social imperatives and offer appropriate solutions. While our starting point is the voice of our customers, we also pay heed to issues of global significance, such as global warming, with the aim of predicting trends and anticipating the future needs of society.

## **Business Activities with Roots** in Societal Issues

Forces propelling the increased presence of electric vehicles include the need to reduce emissions of greenhouse gases and promote the use of renewable energy, both critical to resolving such crucial issues as global warming and fossil fuel depletion. However, a number of technological challenges must be addressed to further expand use of electronics in such vehicles. Of particular note, it is necessary to increase the capacity of storage batteries and to reduce the size and weight of powertrains<sup>\*1</sup>. With the goal of responding to social imperatives, DIC will continue to promote extensive research aimed at addressing these challenges, based on which we will develop technologies that facilitate concrete, viable solutions, including innovative materials that boost battery capacity and improve the performance of power devices\*<sup>2</sup>. In the information and communications field, the growing trend toward wearable\*3 and flexible\*4 devices, bolstered by the increased sophistication

of information networks, continued to drive the development of materials for printed electronics. In addition to automobiles, information and communications and other fields that necessitate advanced technologies, DIC is also responding to social imperatives in such areas as packaging, graphics and the field the Company has dubbed "life and living."

## **Enhancing Brand Strength**

Established as a printing inks manufacturer, DIC has expanded its business by leveraging its capabilities in organic pigments and synthetic resins. The Company's wealth of elemental technologies is what makes these products possible. To encourage broader customer awareness of its distinctive products and technologies, DIC publishes market-oriented product guidebooks (editions for electronics and automotive products, packaging products and

products for the life and living field). DIC also strives to enhance the strength of the DIC brand through participation in trade shows such as FINETECH JAPAN and Tokyo Pack.



\*1 In a motor vehicle, the powertrain is the group of components that transform stored energy into kinetic energy for the purpose of propulsion. The engine generates power and transfers it via the transmission to driveshaft, differentials and final drive. A power device is a semiconductor used as a switch or rectifier in power electronics.

other stiff, breakable materials,

VOICE rom the DIC Group

## We begin by analyzing social needs.

Our team is charged with analyzing global megatrends from four perspectives: the environment; economic and political implications; legal implications and standardization; and technology, and using our findings to predict what sorts of new markets future social needs will bring about. The emergence of any new market almost always brings a host of technological challenges. We work with R&D departments to promote the development of new technologies that address such challenges. Looking forward, I'm excited to be helping DIC provide solutions to social imperatives in such areas as resources and energy, transport vehicle, construction, and healthcare and medical devices.



Manager, Corporate Marketing Dept. Tomoko Mimura

<sup>&</sup>lt;sup>4</sup> Wearable devices are incorporated into accessories such as watches and glasses and wom on the body rather than carried like traditional mobile devices such as smartphones and tablet computers.
<sup>4</sup> Flexible devices are bendable, rollable and more durable than conventional devices made with glass or

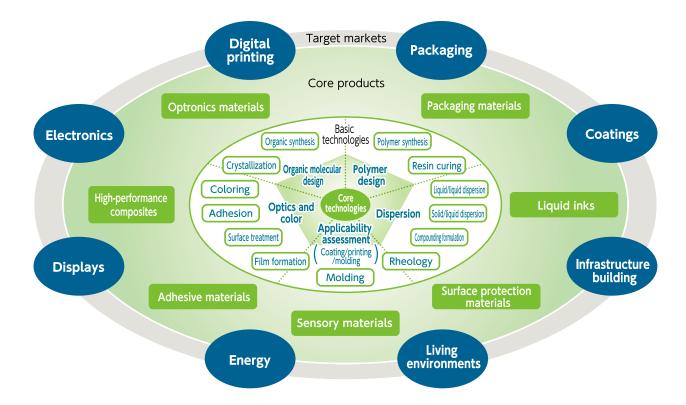
# Proposing Solutions that Leverage DIC's Elemental Technologies

WEB http://www.dic-global.com/en/csr/technology\_development.html

## **Developing New Technologies and Creating Value**

With the aim of achieving its Color and Comfort by Chemistry management vision, the DIC Group is leveraging its core technologies, including those in the areas of optics and color, organic molecular design and polymer design, as well as its elemental technologies in such areas as synthesis, compounding and formulation, and surface treatment, to develop high-value-added products. The Group is also building a portfolio of next-generation products and new technologies that will support sustainable growth for such key applications as LCDs, electronics, digital printing and packaging, by integrating technological resources originating across the Group.

## The DIC Group's New/Elemental Technologies and Target Markets



## **Specific Initiatives and Achievements**

In addition to promoting the use of water as a base material and the elimination of solvents, the DIC Group is advancing the development of environment-friendly products that will help enhance the environmental performance of the LCDs, electronics and electrical equipment, automobiles, printing inks and other finished products in which they are used.

#### Products Used in LCDs

In the area of organic pigments for the color filters used in LCDs, DIC recently launched a new blue pigment. The Company is also working to further enhance the performance of its green pigments for color filters, which are renowned for delivering excellent brightness and contrast. In the area of LC materials, DIC is taking steps to further improve the capabilities of its products for use in large-screen LCD televisions and continues to promote the development of new LCs for next-generation devices.

## Products Used in Electronics and Automotive Applications

In PPS compounds, DIC previously developed a molding compound that delivers improved thermal resistance and vapor barrier properties and is increasingly favored for use in electrical components for hybrid vehicles. In industrial adhesive tapes, recent development efforts yielded a number of products that have improved the performance of smartphones. These include an antiscattering adhesive film, which leverages DIC's exclusive hard coat technologies to prevent shards of glass from scattering in the event of screen breakage and also offers increased fingerprint resistance, as well as a waterproof double-sided adhesive tape and an ultrathin adhesive tape.

### Printing Inks

In the area of offset inks, recent efforts focused on UV-curable inks that deliver outstanding sensitivity and printability and respond to the use of UV printing systems that use weaker UV radiation or LED lamps, thereby reducing consumption of electric power. In gravure inks, DIC commenced full-scale sales of a new line of inks for food packaging that maintains the superb image quality and suitability for the high speed of gravure printing and delivers an improved performance in terms of environmental and food safety, thereby responding to the needs of customers seeking to market their products worldwide.

## Promoting Environment-Friendly Products

Conscious always of the importance of ensuring its products are environment-friendly, DIC promotes the development of products and new technologies that are useful to society and works to increase the weighting of environment-friendly products in its portfolio, by reducing the volume of hazardous substances it uses, focusing on products that are less hazardous and products that facilitate recycling, and realizing safer production processes that generate less waste and use less energy. DIC also conducts environmental assessments on a continuous basis and strives to maintain a solid grasp of laws and regulations in different countries and territories and of trends in environmental measures, thereby ensuring its ongoing ability to engineer products that comply with diverse regulations governing the use of chemical substances in different markets. In fiscal year 2013, environment-friendly products accounted for 57% of all products put out by DIC and subsidiary DIC Graphics.

## Life Cycle Assessments: Currently Under Consideration

In recent years, manufacturers have been required to quantify their consumption of nonrenewable resources and their emissions of substances that negatively affect the environment. In response to this and other trends driven by common concerns, DIC is currently considering the introduction of life cycle assessment (LCA) initiatives to ensure it fully grasps the various environmental impacts of all DIC Group products, as well as the adoption of the Greenhouse Gas Protocol's<sup>\*1</sup> Scope 3<sup>\*2</sup> standard.

**VOICE** from the DIC Group

## We are developing PPS compounds for use in next-generation automotive components.

The outstanding heat resistance, electrical properties, chemical resistance and other performance features of PPS compounds have made them a popular alternative to metal materials for components used in automobiles, hot water heaters and lithium–ion batteries (LiBs), among others. With the remarkable rise in popularity of next-generation hybrid, electric and fuel cell vehicles, the need to reduce vehicle weight has accelerated efforts to shrink component size and increase motor output, underscoring the importance of developing new materials and mass production technologies. Our team will continue to address these challenges by capitalizing on the comprehensive strengths of the DIC Group. We look forward to helping expand the Group's share of the global market for PPS compounds.



GTS Project Assistant Manager, Polymer Processing Technical Div. Yasuyuki Yoshino

<sup>\*1</sup> The Greenhouse Gas Protocol, or GHG Protocol, is a suite of standards for calculating and reporting of greenhouse gas emissions.

<sup>2</sup> Scope 3 is the GHG Protocol's standard for calculating indirect greenhouse gas emissions resulting from production, transport, business travel and commuting, among others, across an entire supply chain.

# **Adding Color and Comfort to Lifestyles**

WEB http://www.dic-global.com/en/csr/society/

# Basic Approach to Social Contribution

Based on its Guidelines for Social Contribution Activities, established in fiscal year 2009, the DIC Group promotes harmony with local communities and individuals through activities aimed at building a strong relationship with society.

# Examples of Recent Social Contribution Initiatives

Publication of the Guidebook for the Color Universal Design-Recommended Color Set

The DIC Group is actively involved in R&D in the area of color universal design (CUD), as well as expanding public awareness and understanding of CUD's importance. In November 2013, research conducted by the Group—in cooperation with the Japan Paint Manufacturers Association, the Industrial Research Institute of Ishikawa and the Color Universal Design Organization and under the supervision of the University of Tokyo—published the *Guidebook for the Color Universal Design–Recommended Color Set.* In developing this color set, participating organizations capitalized on their particular expertise in color vision characteristics to verify and adjust proposed colors, a process that facilitated the creation of a set of colors that are relatively easy to distinguish regardless of ability to see colors and can

## **Guidelines for Social Contribution Activities**

In line with its Color and Comfort by Chemistry management vision, the DIC Group will promote social contribution initiatives in three areas: business activities, culture and education, and the community and society.

WEB http://www.dic-global.com/en/csr/society/guideline.html

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be reproduced using printing inks, coatings and digital imaging devices. The set encompasses 20 easy-to-distinguish colors: nine high-saturation accent colors suitable for publications design, printed text and other comparatively small surfaces; seven colors appropriate for broader surfaces such as directories and maps; and four achromatic colors easily distinguished from the preceding 16 colors, thereby ensuring information is conveyed accurately, and usable in printing inks, coatings and digital imaging devices. (Two additional alternative colors are included for coatings.)

WEB http://www.dic-graphics.co.jp/navi/color/ud.html (Japanese only)

## COMMENT

## Our goal was to make CUD a design system that everyone can use.

We've had many people say to us that they want to apply CUD to their design work, but that they don't know what colors are easy to distinguish and need some sort of guide. These are the people we had in mind when we produced the Color Universal Design–Recommended Color Set. We developed the set by taking colors that are commonly found in everyday life and for each chose the tones that were easiest to discern. This color set has been adopted for a wide range of applications, including publications and choosing colors for information on signs. We've received a great deal of positive feedback from people who have found the set useful in design work. DIC's new *Guidebook for the Color Universal Design–Recommended Color Set* provides information on where and how the color set should be used, as well as advice on things designers need to be mindful of, all presented in an easy-to-understand format. Looking ahead, we will continue to modify and improve the Color Universal Design–Recommended Color Set in response to feedback on actual examples of use, as well as to advances in coating and printing technologies.

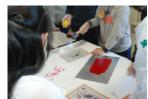


Associate Professor, Institute of Molecular and Cellular Biosciences, University of Tokyo Kei Ito

## Science Lab Program

In line with the Japanese government's effort to promote career education initiatives for students, as well as to help curb a decline in the popularity of science among children—an issue of increasing concern in Japan—the DIC Group provides employee-taught visiting science labs at public schools with the aim of encouraging children to realize the close relationship between science and their daily lives. Drawing on its distinctive capabilities, DIC conducted a visiting science lab program in 2013 that focused on simple experiments in pigment synthesis and offset printing. Evaluated highly for its curriculum, as well as for the consistency of its activities, this program was among the top finishers in the 2013 CSR Initiative Award in Education\*1, sponsored by Tokyo-based Leave a Nest Co., Ltd., winning in the Award for Visiting Labs and Lectures for Elementary School Children category and placing in the Award for CSR Initiatives in Education Selected by Junior and Senior High School Students category.

\*1 The CSR Initiative Award in Education comprises the Award for Visiting Labs and Lectures for Elementary School Children and Award for CSR Initiatives in Education Selected by Junior and Senior High School Students, which are voted on by, respectively, teachers and junior and senior high school students from across Japan.



Science lab



DIC's 2013 CSR Initiative Award in Education certificates

## Initiatives Led by the Central Research Laboratories

The Central Research Laboratories offers a variety of visiting science labs and classes on uniquely DIC themes such as chromatics for nearby schools. In May 2013, employees from the facility served as lecturers for a science lab titled "Experiencing Science through Household Items" at Chiba Prefectural Funabashi High School, a designated Super Science High School\*<sup>2</sup>. Led by researchers from the Central Research Laboratories, the lab included experiments in extracting the natural colorant from Spirulina and rheology (the study of the deformation and flow of matter) experiments using mayonnaise and honey. Lecturers also incorporated a career education component to the lab, taking time after the lecture and experiments to talk to interested students about the challenges and rewards of being a researcher.

\*2 Super Science High School is a designation awarded by Japan's Ministry of Education, Culture, Sports, Science and Technology (MEXT) to senior high schools that implement curricula focused on the sciences and mathematics that goes beyond the Ministry's official guidelines with the aim of fostering the next generation of talented engineers and scientists.

#### Kawamura Memorial DIC Museum of Art

The Kawamura Memorial DIC Museum of Art, located adjacent to the Central Research Laboratories in Sakura, Chiba Prefecture, was established in 1990 to publicly exhibit works of art collected by DIC Corporation and its affiliates. In May 2014, the museum will celebrate its 25th anniversary. The museum exhibits works from a collection that spans numerous genres, with a focus on 20th century American art, and encompasses works by Rembrandt; Impressionists such as Monet and Renoir; modern European artists such as Picasso and Chagall; and early modern, modern and postwar Japanese artists.

In 2014, the museum will hold a special exhibition showcasing works from its permanent collection that will include a number of seldom-shown pieces. Also on the calendar is a retrospective exhibition of works by much-talked-about young Japanese artist Tomoo Gokita, scheduled to begin in September.

Another appealing aspect of the Kawamura Memorial DIC Museum of Art is its location on a lushly forested 10-hectare site that has been open to the public since the museum's establishment. In 2013, the museum established a flower garden

#### COMMENT

## We strive to build bridges that enable children to connect with today's fast-changing world.

DIC's visiting science lab program in 2013, the theme of which was "Chemistry's Ability to Bring Color to Life," won in the Award for Visiting Labs and Lectures for Elementary School Children category and placed in the Award for CSR Initiatives in Education Selected by Junior and Senior High School Students category in the 2013 CSR Initiative Award in Education, which we sponsor. Voters were particularly impressed by the choice of subjects familiar to children—pigments, which are used to color most industrially manufactured products, and offset printing, used for school textbooks and other printed materials—to convey the close links between science and everyday life, as well as by the fact that DIC employees actually went to schools. Many of the teachers who voted this time commented that the value of the program was that it not only encouraged children to take an interest in science but also enabled them to connect with the outside world through communication with DIC employees. This is the true potential of CSR initiatives in education.



Education Development Division, Leave a Nest Co., Ltd. Haruna Kusu



in one area of the site containing more than 100 species of flowering plants and trees that enables visitors to enjoy the colors of seasonal flowers and foliage. Active in efforts to preserve woodlands and biodiversity, the museum has also established a biodiversity satellite, a special biodiversity-themed display area, in cooperation with the Chiba Biodiversity Center.





**Biodiversity satellite** 

Nature trail

## Spirulina: Promoting Harmony with Society

The DIC Group is the world's largest supplier of Spirulina, a cyanobacteria rich in more than 50 nutrients, including vitamins, minerals and essential amino acids. In line with a support agreement concluded in 2009 with the Alliance Forum Foundation (AFF)\*, a Japan-based nonprofit organization (NPO), the Group provides assistance to the Spirulina Project, an AFF initiative that seeks to alleviate hunger and improve nutrition in the Republic of Zambia.

In June 2012, with the purpose of contributing to the well-being

of the people of Zambia, we implemented a project to assess the impact of Spirulina on human health. This project verified a reduced incidence of malnutrition among children who regularly consumed Spirulina.

Encouraged by these findings, the DIC Group and the AFF



are currently conducting production and technological feasibility studies in Zambia with the aim of facilitating local cultivation of Spirulina for local consumption. In addition to maintaining existing programs, which include the donation of bulk powdered Spirulina, the DIC Group has broadened the scope of its efforts to encourage awareness and consumption of Spirulina in Zambia. Currently, the Group also welcomes Zambian engineers to Japan for training and provides production and technological support through assistance with selecting locations for cultivation and providing information on raw materials.

The DIC Group is also engaged in a variety of other initiatives designed to promote the nutritional value of Spirulina. In fiscal year 2013, these included a nutritional education program for private elementary schools in the Nagoya area.

 The AFF is an NGO established in 1985 in California by current Chairman of the Board George Hara. The goals of the AFF include supporting the advancement of developing countries.

## Fundraising Efforts in Support of Social Welfare Initiatives

DIC has a matching gift program whereby it matches the total amount collected through an annual year-end fundraising drive spearheaded by its employees' union. Funds raised through the 2013 drive and matching

gift program were donated to 19 children's homes and facilities providing support for disabled individuals.



DIC employees visiting Hifumi Gakuen in Machida, Tokyo, to present a donation

## Support for Reconstruction Following the Great East Japan Earthquake and Other Disasters

Since 2011, DIC has provided support for reconstruction in areas devastated by the Great East Japan Earthquake as a participant in the IPPO IPPO NIPPON project, an initiative organized for this purpose. In fiscal year 2013, DIC also donated funds to assist recovery efforts in the Philippines following Typhoon Haiyan, a super typhoon that struck in November 2013. Funds were

given to the Philippine Red Cross via DIC Philippines, Inc., with DIC Philippines' general manger Mario Estrada visiting the Red Cross directly to present DIC's donation.



IPPO IPPO NIPPON project logo

# **Promoting Disclosure and Communication**

WEB http://www.dic-global.com/en/csr/stakeholder/

## Basic Approach to Promoting Communication

The DIC Group places a priority on communication with stakeholders, which it promotes actively through, among others, direct dialogue, websites and events. By communicating effectively with stakeholders, the Group strives to ensure an adequate understanding of stakeholder expectations to ensure such expectations are reflected in its business activities. The DIC Group is also expanding its awareness of the concept of stakeholder engagement, a key requirement under ISO 26000.

## **Ties with Customers**

In fiscal year 2013, the DIC Group promoted a number of initiatives aimed at enhancing communication with customers in Japan. In August 2013, we redesigned the showroom at the Central Research Laboratories in Sakura, Chiba Prefecture, enabling us to provide a better experience for visitors to the facility. The revamped showroom features displays that illustrate the key role DIC products play in everyday life, a format designed to stimulate interaction between visitors and staff.

As an organization with a global presence, the DIC Group works continuously to strengthen its ties with customers in overseas markets. In fiscal year 2013, the Group introduced a number of advanced technologies at electrical- and electronics-themed trade shows in Asia, including major flexible panel display (FPD)themed trade shows in Taiwan and the PRC in August and October, respectively, and the International Meeting on Information Display (IMID) in the city of Goyang, in the ROK, in October.

# Ties with Shareholders and Investors

The DIC Group strives to ensure fair, appropriate and timely disclosure and to communicate closely with investors and incorporate their opinions and requests into its management and operating activities. In fiscal year 2013, the Group sought to enhance communication with domestic investors by holding two results presentations for institutional investors and securities analysts, as well as by participating in investor relations (IR) conferences and small-group meetings. Overseas, the Group held IR meetings in North America, Europe and Asia, encouraging greater understanding of the Group's strategies through presentations by senior executives.

## Topic Responsible Care Dialogue Meeting Held at Sakai Plant

In February 2014, DIC's Sakai Plant hosted the ninth Sakai–Senboku region Responsible Care dialogue meeting. This meeting, which is sponsored by the RC Committee of the Japan Chemical Industry Association (JCIA) and five committee member companies with operations in the Sakai–Senboku region (Mitsui Chemicals, Inc., Lion Corporation, Ube Industries. Ltd., Sakai Chemical Industry Co., Ltd., Kyowa Hakko Kirin Co., Ltd. and DIC) and held biennially with the aim of deepening local understanding of the activities of member companies, focuses on introducing the operations of the companies and panel displays describing the companies' Responsible Care initiatives. The 2014 meeting welcomed 80 stakeholders, including local government and other officials, municipal employees and teachers.

DIC's presentation touched on the Sakai Plant's earthquake safety measures and tsunami countermeasures, both areas of particular concern, and succeeded in increasing local awareness of the Sakai Plant's emergency shutdown system, emergency shutdown training program and tsunami evacuation plan and emergency supply stockpile. Following the presentation, DIC took participants on a tour of the Sakai Plant and held a session to exchange views. Response to DIC's efforts was positive, with participants commenting that they had learned a lot about the history and operations of DIC and of the Sakai Plant, and that they recognized DIC as a Company that would put safety and respect for human life first in the event of an earthquake or a tsunami.



The general manager of the Sakai Plant greets participants



Participants listen intently to DIC's presentation

For individual investors in Japan, the DIC Group provided tailored information via its corporate website and through an

article in *IR Magazine*, with the aim of improving understanding of the Group and its business activities.



Results presentation (February 2014)

## **Ties with Society**

In addition to the business community, the DIC Group took steps to enhance communication with students and other consumers in fiscal year 2013. In October, subsidiary DIC Color Design, Inc., participated in Tokyo Designers Week 2013, taking part in an exhibit focusing on Asian color use and aesthetics that enabled it to convey the DIC Group's role as an organization that helps bring color to life to a variety of stakeholders. In December, DIC participated in Eco-Products 2013, marking its first appearance in this annual event, which is noted for attracting a broad range of ordinary consumers. DIC's Eco-Products 2013 booth included environment-friendly printing inks; PPS resin, which plays a key role in reducing the weight of automobiles; and a presentation on how the Group's technologies for cultivating Spirulina are aiding research in the area of biofuels.



DIC's booth at Eco-Products 2013

Tokyo Designers Week 2013

#### Executives from Southeast Asia Tour Sakai Plant's Wastewater Treatment Facility

In November 2013, 20 participants in the Program on Industrial Waste-Water Treatment Technologies for Asia (PAWW), an initiative hosted by the Overseas Human Resources and Industry Development Association (HIDA) in collaboration with Osaka Prefecture, toured the wastewater treatment facility at DIC's plant in Sakai, Osaka. PAWW program participants are executives and management-level employees from Thailand and other parts of Southeast Asia. The inclusion of the Sakai Plant's wastewater treatment facility in the program reflects the solid marks accorded its performance over the years by the Osaka government's Environment Bureau, which has endorsed the plant as a model for such facilities.

After visitors were greeted by the general manager of the Sakai Plant, the leader of the plant's Environment, Safety and Quality Group gave a brief outline of the plant's wastewater treatment facility. Participants were then taken to see the facility in action.



PAWW participants touring the Sakai Plant's wastewater treatment facility

Because the Sakai Plant's wastewater treatment facility is jurisdictionally located in the Seto Inland Sea region, it is subject to numerous restrictions governing impurity concentrations and volumes and wastewater discharge. In response to these stringent regulations, in 1973 the plant brought a new current wastewater treatment facility on line. Since then, the facility has operated without incident, a factor that in DIC's view has contributed to its outstanding reputation. In addition to the facility, praise has been given to the technological skills of facility operators. Facility operators also provide training for DIC Group companies worldwide, underscoring the importance DIC places on ensuring its technologies are passed down to successive generations of employees.

Looking ahead, the Sakai Plant pledges to continue contributing to environmental protection by ensuring the water it returns to the sea is clean and safe.

## Ties with Employees

The DIC Group promotes a variety of initiatives to encourage active communication with its employees. *DIC Plaza*, the Group's in-house newsletter, which is published in Japanese and English, as well as a Group intranet and various portal sites enable DIC to share information with employees and enhance understanding of its activities. DIC also makes use of an in-house social networking service dubbed CoCoT, and various other media to facilitate the exchange of information among employees.

Recently, the Group launched a new initiative comprising operating results presentations for employees given by the president and CEO, the goal of which is to enhance understanding of the Group's current operating and financial status and of management strategies. In fiscal year 2013, DIC's corporate headquarters in Tokyo hosted two such presentations. Presentations were also held at 15 other key sites over the course of the year.

To advance awareness of CSR, training for new employees

includes a group work-based component that focuses on social imperatives, providing an opportunity for participants to learn about the links between such issues and business activities.



DIC Plaza, the DIC Group's in-house newslette

# DIC Report 2014 and ISO 26000: A Comparison

Core subjects	No.	Themes	Relevant page	Relevant sections/initiatives
			P8	The DIC Group's Sustainability Program
Organizational Governance			P5-7	A Message from the President
			P23-24	Goals and Achievements of Major Sustainability Initiatives
			P25-26	Goals and Achievements of Major Responsible Care Initiatives
	6.2	Organizational governance	P22	Corporate Governance
			P27	Towards Fair and Transparent Corporate Activities
			P28	Reducing Business Risks and Preventing Recurrence of Incidents
			P46	Establishing a Solutions Business
			P52-53	Promoting Disclosure and Communication
			P8	From CSR to Sustainability
	6.3.3	1. Due diligence	P42	Respect for Human Rights
		<b>A</b> 11 - 11 - 11 - 11 - 11	P45	Global Supply Chain Management
	6.3.4	2. Human rights risk situations	P45	Global Supply Chain Management
	6 9 5	2 Australiance of complicity	P8	Ensuring DIC Remains a Globally Trusted Corporate Citizen with a Proud Reputation
	6.3.5	3. Avoidance of complicity	P22	Leveraging its Position as a Global Manufacturer of Fine Chemicals to Support the UNGC
Human Rights	626	A Deschuing grievenese	P45	Global Supply Chain Management
	6.3.6	4. Resolving grievances	P27	System to Ensure Respect for Compliance
	6.3.7 6.3.8	5. Discrimination and vulnerable groups	P42	Promoting Diversity
	6.3.9	<ol> <li>6. Civil and political rights</li> <li>7. Economic, social and cultural rights</li> </ol>	 P51	Spirulina: Promoting Harmony with Society
	0.3.9		PSI P8	Ensuring DIC Remains a Globally Trusted Corporate Citizen with a Proud Reputation
	6.3.10	<ol><li>Fundamental principles and rights at work</li></ol>	P22	Leveraging its Position as a Global Manufacturer of Fine Chemicals to Support the UNGC
	6.4.3	1. Employment and employment relationship	P42-44	Working to Enhance Job Satisfaction
	6.4.4	<ol> <li>Conditions of work and social protection</li> </ol>	P43	Initiatives that Support a Healthy Work–Life Balance
Labour	6.4.5	3. Social dialogue	<u> </u>	
			P31-33	Occupational Safety and Health, Security and Disaster Prevention
Practices	6.4.6	<ol> <li>Health and safety at work</li> </ol>	P39-40	Supporting the Activities of DIC Group Companies Worldwide
	6.4.7	5. Human development and training in the workplace	P44	Securing and Fostering Human Resources
	0.4.7		P15	Shielding houses and other structures from UV rays and air pollution (special feature)
			P30-31	Promoting Responsible Care
		1. Prevention of pollution	P34-35	Preventing Global Warming
	6.5.3		P35-36	Reducing Emissions of Chemicals into the Environment
			P36-37	Reducing Industrial Waste
				Product Chemical Substance Management
The			P38-40 P16	Enhancing the environmental performance of food containers, electrical appliance components and insulating materials (special feature)
Environment			P19	Making today's advanced information society easier to navigate and more environment-friendly (special feature)
	6.5.4	<ol> <li>Sustainable resource use</li> </ol>	P38	Global Warming Prevention Initiatives in the PRC
			P47-48	Proposing Solutions that Leverage DIC's Elemental Technologies
	6.5.5	3. Climate change mitigation and adaptation	P34-35	Preventing Global Warming
	0.0.0		P38	Global Warming Prevention Initiatives in the PRC
	6.5.6	4. Protection of the environment, biodiversity and restoration of natural habitats	P50-51	Kawamura Memorial DIC Museum of Art
	6.6.3	1. Anti-corruption	P27	Framework for Promoting Compliance
	0.0.0		121	System to Ensure Respect for Compliance
Fair Operating	6.6.4	<ol><li>Responsible political involvement</li></ol>	—	—
Practices	6.6.5	<ol><li>Fair competition</li></ol>	P27	Basic Outline of The DIC WAY Code of Business Conduct
	6.6.6	4. Promoting social responsibility in the value chain	P45	Global Supply Chain Management
	6.6.7	5. Respect for property rights	P27	Basic Outline of The DIC WAY Code of Business Conduct
	6.7.3	1. Fair marketing, factual and unbiased	P38-40	Product Chemical Substance Management
	0.7.0	information and fair contractual practices	P20	Topic 1 Sun Chemical Revamps its Website
			<b>B00 0 0</b>	Promoting Responsible Care
	6.7.4	2. Protecting consumers' health and safety	P30-33	Occupational Safety and Health
Comment			<b>D0</b> 4	Security and Disaster Prevention
Consumer			P21	Topic 2 DIC Expands Supply Capabilities for <i>Linablue</i> <sup>®</sup> Natural Blue Food Coloring Seeking to extend the lives of solar cell modules (special feature)
ssues	6.7.5	<ol><li>Sustainable consumption</li></ol>	P17-18 P47-48	Proposing Solutions that Leverage DIC's Elemental Technologies
	6.7.6	4. Consumer service, support, and	P47-48 P38	Proposing Solutions that Leverage Dic's Elemental Technologies
	0.7.0	complaint and dispute resolution	P30 P41	Quality Management (Customer Satisfaction)
	6.7.7	5. Consumer data protection and privacy	P29	Initiatives to Ensure Information Security
	6.7.8	6. Access to essential services	F 2 9	—
	6.7.9	7. Education an awareness	P53	Ties with Society
			P49	Basic Approach to Social Contribution
	6.8.3	1. Community involvement	P51	Spirulina: Promoting Harmony with Society
				Science Lab Program
	6.8.4	2. Education and culture	P50-51	Initiatives Led by the Central Research Laboratories
Community	0.0.4			Kawamura Memorial DIC Museum of Art
Community Involvement	0.0.4			
Involvement	6.8.5	3. Employment creation and skills	—	—
Involvement and		<ol> <li>Employment creation and skills</li> <li>Technology development and access</li> </ol>	 P49	Publication of the Guidebook for the Color Universal Design-Recommended Color Set
Involvement	6.8.5			
Involvement and	6.8.5 6.8.6	4. Technology development and access		

# **DIC History**

## 1908 Established as Kawamura Ink Manufactory

Established by Kijuro Kawamura as Kawamura Ink Manufactory; adopts the dragon as its product trademark and begins manufacturing inks.



DIC's founder, Kijuro Kawamura



#### Dragon product trademark

## **1915** Commences production of offset printing inks

Becomes one of the first companies to conduct research in the area of offset printing inks and succeeds in producing a viable product in only one year.

## **1925** Begins production of organic pigments

Develops production method for organic pigments and begins production for its own use, the first step in its evolution as a fine chemicals manufacturer.

## 1940

## Commences production of water-based gravure inks

Amid wartime restrictions on use of volatile oils, develops water-based gravure inks—one of several achievements that would later facilitate expansion into synthetic resins.

Promotes expansion of printing inks business

## 1952

## Establishes joint venture with Reichhold Chemicals Inc. of the United States

Becomes one of the first companies to conduct research in the area of offset printing inks and succeeds in producing a viable product in only one year.



Reichhold Chemicals' San Francisco plant

## 1957

## Enters the market for helmets and other molded plastic products

Enters the plastic products business with the aim of becoming an integrated manufacturer with operations encompassing production of everything from plastic raw materials to finished products.

## 1962 Changes Company name to Dainippon Ink and Chemicals

Embarks on a new chapter in its history by absorbing Japan Reichhold Chemicals, Inc. and changes Company name to Dainippon Ink and Chemicals Incorporated (DIC).



## **1968** Commences sales of

DIC Color Guide®

Color chips bearing the DIC name serve to bolster recognition of the Company.



## **1970** Enters the multilayered films business

Establishes Crown Zellerbach Packaging Materials Japan Co., Ltd., in a joint venture with Crown Zellerbach Corporation of the United States and Nippon Kakoh Seishi Co., Ltd., and enters the multilayered films business.

## **1973** Enters the market for LCs

Develops revolutionary high-performance, long-lasting nematic LCs, commencing its evolution into one of the world's foremost manufacturers of LCs.



Nematic LCs

Diversifies operations by building on base in printing inks, organic pigments and synthetic resins

## 1973 Establishes

## Establishes the Environment and Safety Response Department

Creates department under the direct supervision of DIC's president to oversee safety and environmental initiatives (today's Responsible Care Department); creates Environment and Safety Management Regulations and Interim Emergency Countermeasures Department and begins promoting decisive efforts, including the implementation of plant safety inspections.

## 1986

Acquires the graphic arts materials division of Sun **Chemical Corporation of the United States** 

Becomes world's largest manufacturer of printing inks in terms of market share and leading name in graphic arts materials business.



Sun Chemical's headquarters

## 1999 Succeeds in developing 100% soybean

oil-based printing ink Amid rising awareness of environmental issues, develops Japan's first organic solvent-free sheetfed offset ink.



New Champion Naturalith 100 organic solvent-free sheetfed offset ink

> Seeks to advance global position through mergers and acquisitions

## 1990 Opens Kawamura **Memorial Museum of Art**

Located in Sakura, Chiba Precfure, adjacent to the Central Research Laboratories; established to exhibit works of art collected by DIC and DIC Group companies; now called the Kawamura Memorial DIC Museum of Art



Kawamura Memorial DIC Museum of Art

## 1995

## **Declares intention to uphold the** principles of Responsible Care

Takes an active role in the Responsible Care movement since the start as one of 74 founding members of the Japan Responsible Care Council (JRCC); reinforces efforts to, among others, reduce negative environmental impact of operations and reduce energy consumption. Responsible Care



## 2009 Establishes DIC **Graphics Corporation**

In October 2009, establishes a joint venture with Dai Nippon Printing Co., Ltd. subsidiary The Inctec Inc. and integrates its domestic printing inks business with the printing inks business of The Inctec.

## 2013 Launches DIC105 medium-term management plan

Embarks on a new plan-the slogan of which is "Step Beyond"-that is positioned as the first three year phase of a longer-term initiative that sets clear, concrete objectives for fiscal year 2018.

2008 Changes Company name to **DIC** Corporation In April 2008, changes Company name and adopts new corporate symbol.



2006

manufacturers.

**Becomes signatory** 

to the Responsible **Care Global Charter** Signs Declaration of Support for the Responsible Care Global Charter, established by the International Council of Chemical Associations, as befits its status as a member of the

global community of fine chemicals

36 2

**DIC Corporation** 

ψ.

2007

Certification of DIC as Signatory to the Responsible Care Global Charter

Launches CSR program

Begins promoting CSR initiatives;

identifies fulfilling its responsibilities as a

member of society through its business

activities and contributing to the evolution

of society as the cornerstones of CSR.

In Case<sup>®</sup> Clabal Chart

## Focuses on enhancing core competencies

## 2010 **Joins United Nations Global Compact**

In December 2010, becomes a participant in the United Nations Global Compact, with the aim of maintaining its reputation as a socially responsible corporate entity.



Network Japan WE SUPPORT

## 2014 **Changes designation to** "sustainability"

Clarifies its overall policy of achieving sustainability in a manner that takes into account, among others, the environment, ecosystems and socioeconomic issues, and changes the designation used across its program from "CSR" to "sustainability."



In-house poster promoting sustainability initiatives

# Sustainability initiatives

**DIC History** 

# **CORPORATE DATA**

## **Corporate Data**

Registered name:	DIC Corporation
Registered address:	35-58, Sakashita 3-chome, Itabashi-ku, Tokyo 174-8520, Japan
Corporate headquarters:	WATERRAS TOWER, 101, Kanda Awajicho 2-chome, Chiyoda-ku, Tokyo 101-0063, Japan Tel: +81-3-6733-3000
Date of foundation:	February 15, 1908
Date of incorporation:	March 15, 1937
Paid-in capital:	¥91.2 billion
Number of employees:	20,034 (Nonconsolidated: 3,484)
Domestic facilities:	Two branch offices,
Number of subsidiaries and affiliates:	six sales offices and 10 plants 176 (Domestic: 33, Overseas: 143)

(Information is as of December 31, 2013.)

## **Consolidated Financial Highlights**

	l year 2012 (Year ended rch 31, 2013)	Fiscal year 2013 (Nine months ended December 31, 2013)	
Net sales	¥703,781	¥705,647	
Operating income	38,484	40,181	
Ordinary income	35,137	37,123	
Net income	19,064	26,771	
Earnings per share (ye	20.80 (ר	29.23	
Total assets	692,991	761,690	
Millions of yen, except for per share information			



These graphs have been prepared from the accounts maintained in accordance These graphs have been prepared from the accounts mananed in accounter with the provisions set forth in Japan's Companies Act and Financial Instruments and Exchange Act. In fiscal year 2012, DIC had 152 consolidated subsidiaries and 31 affiliates.

## **Board of Directors**

Chairman of the Board	Kazuo Sugie	Director	Akira Konishi
Representative Director	Yoshiyuki Nakanishi	Director	Tetsuro Agawa
Representative Director	Masayuki Saito	Director	Takao Suzuki*
Director	Yoshihisa Kawamura	Director	Yukako Uchinaga*
			* Outside

## **Corporate Auditors**

Corporate Auditor	Jiro Mizutani
Corporate Auditor	Yoshiyuki Mase
Corporate Auditor	Junji Tomita*
Corporate Auditor	Katsunori Takechi*
	* Outside

## **Executive Officers**

President and CEO
Senior Managing Executive Officer
Managing Executive Officer
Managing Executive Officer
Managing Executive Officer
Managing Executive Officer
Managing Executive Officer
Managing Executive Officer

Yoshiyuki Nakanishi	M
Masayuki Saito	E
Yoshiyuki Masuda	E>
Akira Konishi	E:
Kazuo Kudo	E
Toshio Hasumi	E
Tetsuo Agawa	E:

Hitoshi Wakabayashi

anaging Executive Officer Naoyoshi Furuta xecutive Officer Masao Hotozuka xecutive Officer Masami Hatao xecutive Officer xecutive Officer Hiroshi Fujita xecutive Officer Rudi Lenz Toshio Kanbe xecutive Officer **Executive Officer** Hideki Inouchi

Kazunari Sakai

Executive Officer **Executive Officer Executive Officer Executive Officer** Executive Officer **Executive Officer** 

Kaoru Ino Toshifumi Tamaki Masaya Nakafuji Hideo Ishii Koji Tanigami

Shinsuke Toshima

(Information is as of March 31, 2014.)

## Headquarters/Branches in Japan

## **Corporate Headquarters**

#### Headquarters

WATERRAS TOWER, 101, Kanda Awajicho 2-chome, Chiyoda-ku, Tokyo 101-0063, Japan

Tel: +81-3-6733-3000

#### Kanda

No. 2 DIC Bldg., 16-2 Sotokanda 2-chome, Chiyoda-ku, Tokyo 101-0021, Japan

#### Branch Offices

#### Osaka

5-19, Kyutaro-machi 3-chome, Chuo-ku, Osaka 541-8525, Japan Tel: +81-6-6252-6161 Fax: +81-6-6245-5239

#### Nagoya

7-15, Nishiki 3-chome, Naka-ku, Nagoya 460-0003, Japan Tel: +81-52-951-9381 Fax: +81-52-962-3591

#### Sales Offices

#### Sapporo

2-58, Akebono-Nijo 5-chome, Teine-ku, Sapporo,Hokkaido 006-0832, Japan Tel: +81-11-682-7111 Fax: +81-11-682-4100

Sendai

1-45, Nishi-machi, Rokuchonome, Wakabayashi-ku, Sendai, Miyagi 984-0011, Japan

Tel: +81-22-288-6022 Fax: +81-22-287-2258 Niigata

19-17, Sasaguchi 1-chome, Chuo-ku, Niigata 950-0911, Japan Tel: +81-25-247-1277 Fax: +81-25-243-7457

#### Utsunomiya

7-6, Higashishukugo 1-chome, Utsunomiya, Tochigi 321-0953, Japan Tel: +81-28-636-4064 Fax: +81-28-636-4064

#### Takamatsu

425-1, Kokubu, Kokubunji-cho, Takamatsu, Kagawa 769-0102, Japan Tel: +81-87-874-1521 Fax: +81-87-874-3728

#### Fukuoka

15-48, Higashinaka 1-chome, Hakata-ku, Fukuoka 812-9589, Japan Tel: +81-92-472-7811 Fax: +81-92-472-2013

## Plants

## Tokyo

35-58, Sakashita 3-chome, Itabashi-ku, Tokyo 174-8520, Japan Tel: +81-3-3966-2111 Fax: +81-3-3965-4320

#### Chiba

12, Yawatakaigandori, Ichihara, Chiba 290-8585, Japan Tel: +81-436-41-4141 Fax: +81-436-43-1059

#### Hokuriku

64-2, Minatomachi-So, Hakusan, Ishikawa 929-0296, Japan Tel: +81-76-278-2332 Fax: +81-76-278-5354

#### Sakai

3, Takasago 1-chome, Takaishi, Osaka 592-0001, Japan Tel: +81-72-268-3111 Fax: +81-72-268-1705

Kashima

18, Higashifukashiba, Kamisu, Ibaraki 314-0193, Japan Tel: +81-299-93-8111 Fax: +81-299-92-6384

Yokkaichi 5, Kasumi 1-chome, Yokkaichi, Mie 510-0011, Japan Tel: +81-59-364-1151 Fax: +81-59-364-1620

#### Shiga 373, Koujibukuro, Konan,

Shiga 520-3233, Japan Tel: +81-748-72-3711 Fax: +81-748-72-2106

#### Komaki

151-1, Nagare, Shimosue, Komaki, Aichi 485-0825, Japan Tel: +81-568-75-2751 Fax: +81-568-73-4120

#### Saitama

4472-1, Komuro, Ina-machi, Kita-Adachi-gun, Saitama 362-8577, Japan Tel: +81-48-722-8211 Fax: +81-48-722-6087

## Tatebayashi

6023, Tobukogyodanchi, Ohshima-cho, Tatebayashi, Gunma 374-0001, Japan Tel: +81-276-77-2461 Fax: +81-276-77-2468

## Laboratories

**Central Research Laboratories** 631, Sakado, Sakura, Chiba 285-8668, Japan Tel: +81-43-498-2121 Fax: +81-43-498-2229

Qingdao DIC Finechemicals Co., Ltd. A Area, Hit Industrial City, 177 Zhuzhou Road, Qingdao, Shandong Province 266101, People's Republic of China Tel: +86-532-8870-1450 Fax: +86-532-8870-1460

#### Art Museum

Kawamura Memorial DIC Museum of Art 631, Sakado, Sakura, Chiba 285-8505, Japan Tel: +81-43-498-2672 Fax: +81-43-498-2139

#### Principal Domestic Subsidiaries and Affiliates

DC Katsuya Co., Ltd. DH Material Inc. DIC Bayer Polymer Ltd. DIC Color Coatings, Inc. DIC Color Design, Inc. DIC EP Corp. DIC Estate Co., Ltd. DIC Decor, Inc. DIC Filtec, Inc. **DIC Graphics Corporation** DIC Interior Co., Ltd. DIC Kako, Inc. DIC Kitanihon Polymer Co., Ltd. DIC Kyushu Polymer Co., Ltd. DIC Lifetec Co, Ltd. DIC Machinery & Printer's Supplies, Inc. DIC Molding, Inc. DIC Plastics, Inc. Fuji Label Co., Ltd. Hamamatsu DIC Co., Ltd. Japan Formalin Company, Inc. Nippon Epoxy Resin Manufacturing Co., Ltd. Nippon Fine Coatings, Inc. Oxirane Chemical Corp. Renaissance, Inc. SEIKO PMC Corp. SUNDIC Inc. Techno Science, Inc. TOPIC Co., Ltd. YD Plastics Co., Ltd.

(Information is as of March 31, 2014.)

## **Principal Overseas Subsidiaries and Affiliates**

Aekyung Chemical Co., Ltd. Changzhou Huari New Material Co., Ltd. DIC Alkylphenol Singapore Pte., Ltd. DIC Asia Pacific Pte Ltd DIC Australia Pty Ltd. DIC (China) Co., Ltd. DIC Colorants Taiwan Co., Ltd. DIC Compounds (Malaysia) Sdn. Bhd. DIC Epoxy (Malaysia) Sdn. Bhd. DIC Europe GmbH **DIC Fine Chemicals Private Limited** DIC Graphics Chia Lung Corp. DIC Graphics (Guangzhou) Ltd. DIC Graphics (Hong Kong) Ltd. DIC Graphics (Thailand) Co., Ltd. DIC (Guangzhou) Co., Ltd. DIC Imaging Products USA, LLC. DIC India Ltd. DIC International (USA), LLC. DIC Korea Corp. DIC Korea Liquid Crystal Co., Ltd. DIC (Malaysia) Sdn. Bhd. DIC New Zealand Ltd. DIC Pakistan Ltd. DIC Performance Resins GmbH DIC Philippines, Inc. DIC (Shanghai) Co., Ltd. DIC Synthetic Resins (Zhongshan) Co., Ltd. DIC (Taiwan) Ltd. DIC Trading (HK) Ltd. DIC (Vietnam) Co., Ltd. DIC Zhangjiagang Chemicals Co., Ltd. Earthrise Nutritionals, LLC. Hainan DIC Microalgae Co., Ltd. Kangnam Chemical Co., Ltd. Lianyungang DIC Color Co., Ltd. Lidye Chemical Co., Ltd. Nantong DIC Color Co., Ltd. PT DIC ASTRA Chemicals PT. DIC Graphics P.T. Pardic Jaya Chemicals

Qingdao DIC Finechemicals Co., Ltd. Qingdao DIC Liquid Crystal Co., Ltd. Samling Housing Products Sdn. Bhd. Shanghai DIC Ink Co., Ltd. Shanghai DIC Pressure-Sensitive Adhesive Materials Co., Ltd. Shanghai Showa Highpolymer Co., Ltd. Shenzhen-DIC Co., Ltd. Siam Chemical Industry Co., Ltd. Suzhou Lintong Chemical Science Corp. Tien Lee Hong Co., Ltd. TOA-DIC Zhangjiagang Chemical Co., Ltd. Zhongshan DIC Colour Co., Ltd.

Sun Chemical Group Sun Chemical Corporation Benda-Lutz Alpoco Sp. z.o.o. **Benda-Lutz Corporation** Benda-Lutz Skawina Sp. z.o.o. Benda-Lutz Volzhsky ooo Benda-Lutz Werke GmbH Coates Brothers (Caribbean) Ltd. Coates Brothers (East Africa) Ltd. Coates Brothers (South Africa) Pty. Ltd. Coates Brothers (West Africa) Ltd. Coates Screen Inks GmbH Hartmann D.O.O. Hartmann Druckfarben GmbH Hartmann-Sun Chemical EOOD Inmobiliaria Sunchem, S.A. de C.V. Lorilleux Maroc S.A. Parker Williams Design Ltd. Sinclair de Centroamerica S.A. Sinclair S.A. Sun Branding Solutions Ltd. Sun Chemical AB Sun Chemical AG (Austria) Sun Chemical AG (Switzerland) Sun Chemical Albania SHPK Sun Chemical A/S (Norway) Sun Chemical A/S (Denmark) Sun Chemical B.V.

Sun Chemical (Chile) S.A. Sun Chemical de Centro America, SA de CV Sun Chemical Delta B.V. Sun Chemical de Panama, S.A. Sun Chemical do Brasil Ltda. Sun Chemical, d.o.o.e.l. Sun Chemical Group Cooperatief U.A. Sun Chemical Group S.p.A. Sun Chemical (Hai' an) Limited Sun Chemical Inks A/S Sun Chemical Inks Ltd. Sun Chemical Inks S.A. Sun Chemical Lasfelde GmbH Sun Chemical Ltd. (Canada) Sun Chemical Ltd. (U.K.) Sun Chemical Matbaa Mürekkepleri ve Gereçleri Sanayii ve Ticaret A.ş. Sun Chemical N.V./S.A. Sun Chemical Nyomdafestek Kereskedelmi es Gyarto KFT Sun Chemical Osterode Druckfarben GmbH Sun Chemical Oy Sun Chemical Pigments S.L. Sun Chemical Portugal-Tintas Graficas Unipessoal Ltda. Sun Chemical Printing Ink d.o.o. Sun Chemical S.A. Sun Chemical S A de C V Sun Chemical S.A.S. Sun Chemical Sp. z.o.o. Sun Chemical s.r.l. Sun Chemical, s.r.o. (Czech Republic) Sun Chemical, s.r.o. (Slovakia) Sun Chemical Trading (Shanghai) Co., Ltd. Sun Chemical Ukraine Ltd. Sun Chemical ZAO Sun Inkjet Ceramics, S.L. Tintas S.A.

(Information is as of March 31, 2014.)

## **Third-Party Opinion**

#### Counselor, Head of ESG Research Center The Japan Research Institute, Limited Eiichiro Adachi

In his current capacity, Eiichiro Adachi conducts industry research and assesses corporate performance from the perspective of social responsibility. He also provides financial institutions with corporate information for socially responsible investing (SRI). A member of the Market Evolution and Corporations in the 21st Century working group organized by the *Keizai Doyukai* (Japan Association of Corporate Executives), Mr. Adachi was involved in the preparation of The 15th Corporate White Paper on \*Market Evolution\* and CSR Management: Toward Building Integrity and Creating Shareholder Value. He also served as a national expert for Japan to the ISO 26000 working group.



From this year's edition, DIC has combined its previously independent CSR report and corporate profile to create a new kind of report. Care has been taken to present information on business activities and sustainability initiatives in an efficient, easy-to-understand manner.

I found "The DIC Group's Business Portfolio," special feature, "Creating New Value that Responds to Evolving Social Imperatives" and "DIC History" sections very effective in conveying how the DIC Group evolved over a century-plus from its beginnings as a manufacturer of products as ordinary as inks used in letterpress, woodblock and lithographic printing, leveraging its related core technologies to expand continuously into new markets, and developing a broad range of innovative and industrially viable technologies. At the same time, I also thought that the report was very effective in portraying DIC as a company that while very much a technology-driven entity is also highly aware of issues that affect society. The style of the special feature, with each section presenting a specific social imperative and then describing DIC's response thereto, appears to have become a regular fixture of the report. This time, I was particularly interested in the section describing how DIC has long worked to respond to growing global needs for natural food coloring by, among others, capitalizing on business opportunities for the natural blue colorant extracted from Spirulina. I look forward to seeing the Company develop new and different Spirulina-based products.

Last year, I stated that I would like to see DIC significantly expand the inclusion of information based on overseas examples in the report. Unfortunately, this year's report again falls short in this area. From the information contained in the "Important Facilities" section of DIC's Yuka Shoken Hokokusho (annual financial report filed by publicly traded companies in Japan), one can assume that half of the DIC Group's production activities are based overseas. Accordingly, improving use of the PDCA cycle overseas and disclosing information on related efforts must be regarded as crucial aspects of the Group's initiatives to help prevent global warming, manage waste, minimize use of hazardous chemical substances and ensure occupational safety and health.

The section titled "Business Models that Respond to Social Imperatives" makes reference to "analyzing global megatrends... and using our findings to predict what sorts of new markets future social needs will bring about." I see this as a particularly forward-looking way of thinking for a materials manufacturer. I would like to see DIC take this one step further by discussing and identifying what it sees as the ideal society of the future and actively communicating its views to external audiences.

In closing, I read the account of DIC's decision to change the designation across its program from "CSR" to "sustainability" with particular interest. The explanation of DIC's move to clarify the direction of its initiatives and choose a designation that is more suitable to a globally active corporate entity is clear and persuasive. I also find the decision to set forth 10 incremental Group sustainability themes commendable. However, it is important for them to keep in mind that when stakeholders hear a company use the word "sustainability," they naturally expect that the company is referring to both its own sustainability and that of society. Based on the understanding that it's not possible to ensure the health of business activities without ensuring the health of society and the earth, I would like to see DIC take further steps to reduce the negative impacts of its operations and reconfigure, among others, its social contribution program.

This third-party opinion reflects my view of CSR activities and information disclosure of the DIC Group, as understood from reading this report, from my perspective as an individual who provides corporate information to financial institutions to assist SRI. It is not intended as a comment on whether or not the information herein has been measured and calculated accurately to conform to commonly accepted standards for the preparation of environmental or other reports or a judgment on whether the report covers relevant important matters in full.

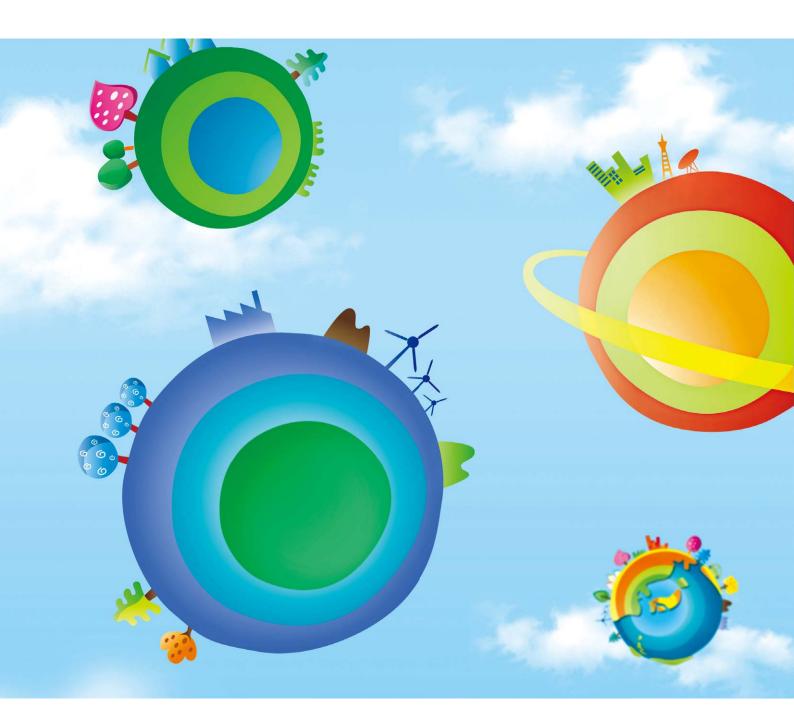
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