

# **DIC REPORT 2016**

The DIC Group's Corporate Profile & Sustainability Report

**DIC** Corporation

**English Version** 

# Color & Comfort

# Innovation through Compounding



# DIC brings innovation to society through its core compounding technologies

Building on fundamental pigment and resin dispersion and compounding technologies realized through the production of printing inks, DIC has succeeded in combining materials with different properties and performance characteristics to develop groundbreaking products and create new value. DIC's mainstay product groups, which include printing inks, polyphenylene sulfide (PPS) compounds and liquid crystal (LC) materials, are the result of innovations made possible by its compounding technologies.

Going forward, the DIC Group will accelerate innovation on a global scale by capitalizing on its ability to compound dissimilar materials and create new value to transform its prowess in wide-ranging technological domains into significant competitive advantages.

# DIC draws on its expertise and comprehensive strengths to offer solutions

DIC strives to respond swiftly and flexibly to the needs of its customers and markets and, as a specialist in providing solutions that help resolve challenges, to provide value that exceeds expectations.

DIC defines itself as a team of specialists with proficiency in such diverse fields as printing inks, fine chemicals, polymers, compounds and application materials. The DIC Group will continue to leverage its competitive advantages, notably its specialized technologies and know-how, to offer specialty solutions that ensure it remains the partner of choice for its customers.





# Making it Colorful



#### DIC helps make life colorful

Established in 1908 as a manufacturer of printing inks, DIC has built on its core organic pigments and synthetic resins technologies to develop an extensive range of materials and products and transform itself into a global powerhouse.

Today, DIC provides not only printing inks and colorants but also a variety of other products and services that deliver "color" and "comfort," enriching and adding vibrancy to people's lives. The global DIC Group employs a broad spectrum of highly skilled individuals who are committed to working together while at the same time respecting diversity to create an evermore-vivid tapestry of value.

# Connecting the DIC Group and its Stakeholders 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.

#### Printed/PDF–Form Publications

DIC Report

Reports on activities

DIC Report (summary version)



initiatives and corporate

profile (published annually)

(Printed report)



Report on sustainability initiatives and corporate profile (published annually) (PDF-form report)

#### Report on operations and financial condition (PDF-form report)

Annual Report

DIC Website

#### Real-time information

#### **DIC Global Website**



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

#### About this Report

The DIC Group publishes a combined corporate profile and sustainability report with the aim of presenting a clear, easy-tounderstand picture of the Group and its sustainability initiatives. For DIC Report 2016, the Group published a simplified summary version (printed), which focuses on key highlights, and a more detailed complete version (PDF), which contains extensive quantitative data.

DIC Report (Complete version) (PDF-form report)

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

Note: The designation "Asia–Pacific region" as used in this report refers to Asia– excluding Japan and Greater China—and Oceania.

#### Links with the DIC Website

The ( ) mark indicates that more detailed information and/or data can be found on the indicated page of the DIC website.

DIC website m http://www.dic-global.com/en/

#### Scope of Reporting

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.

http://www.dic-global.com/en/csr/pdf/dic\_report\_scope\_en\_2016.pdf

#### Reporting Period

Fiscal year 2015 (January 1–December 31, 2015)

Date of Publication

June 2016 (The next report is scheduled for publication in June 2017.)

#### **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; Japan's Responsible Care Code; and the Global Reporting Initiative's G4 Sustainability Reporting Guidelines.

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#### **Cover Design**

The cover of this year's DIC Report is a paper craft artwork that communicates the appeal of the DIC Group's "Color & Comfort" brand slogan and evokes initiatives being undertaken to benefit the global environment, ecosystems and social systems, as well as to ensure sustainable growth for the Group.

# The DIC Group: A Global Powerhouse

**DIC** Corporation

DIC Building, 7-20,

February 15, 1908

(Nonconsolidated: 3,581)

March 15, 1937

¥96.6 billion

Japan

20,264

Nihonbashi 3-chome,

Chuo-ku, Tokyo 103-8233,

## **Corporate Data**

Registered name: Corporate headquarters:

Date of foundation: Date of incorporation: Paid-in capital: Number of employees:

Number of subsidiaries and affiliates:







Notes: 1. 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.
2. Corporate data is as of December 31, 2015. Net sales and operating income are for fiscal year 2015.

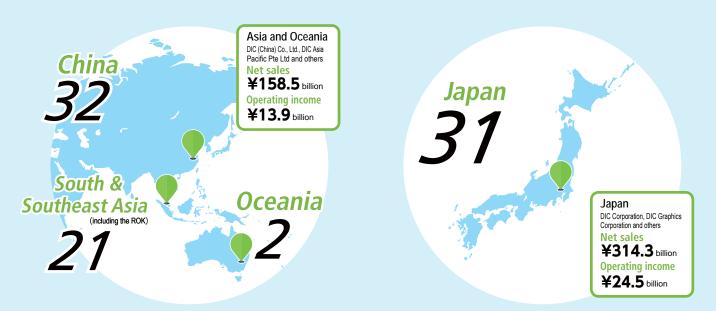


Operating Income (Billions of yen)

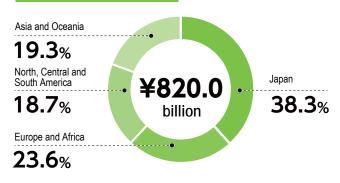


**Global Network** 

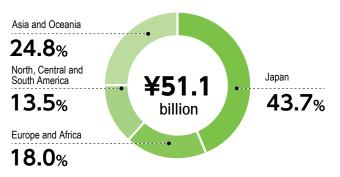
DIC has 174 companies in 64 countries and territories around the world.



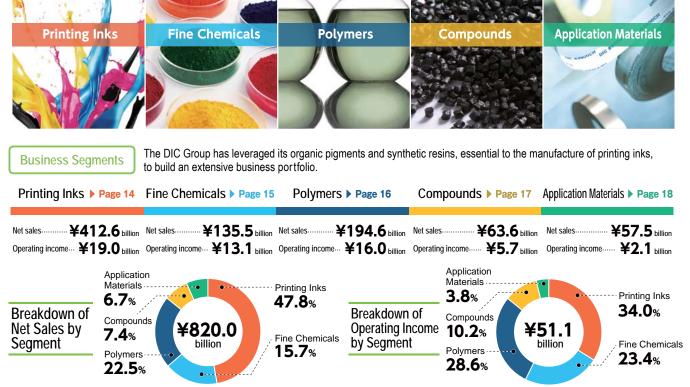
#### Breakdown of Net Sales by Region



Breakdown of Operating Income by Region

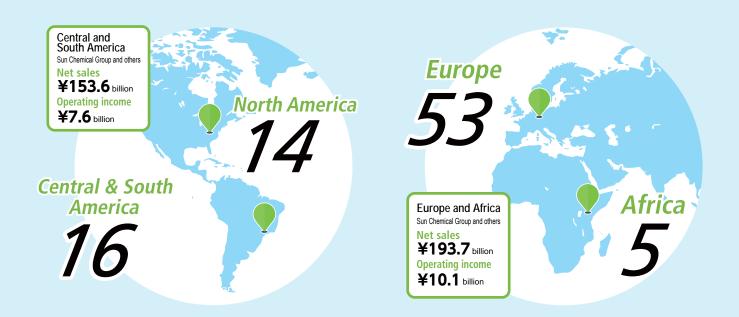


Note: Operating income as used here includes eliminations (approximately ¥4.9 billion). Accordingly, these percentages do not represent shares of reported operating income



Notes: 1. Net sales and operating income as used here include intersegment transactions. For this reason, and because of the existence of transactions

that are not attributable to reportable segments, these figures differ from reported net sales and operating income figures. 2. Effective from January 1, 2016, DIC revised its segmentation. Figures for fiscal year 2015 have been restated to reflect the revised segmentation





# A Message from the President

# DIC108: Our New Medium-Term Management Plan Gets Under Way

Guided by our new brand slogan, "Color & Comfort," we will continue working to achieve sustainable growth.

### The DIC Group Today

The DIC Group is a multinational organization comprising 174 companies in 64 countries and territories around the world. Across our global operations, we continue to promote development and innovation in a manner that contributes to sustainable growth for both our customers and society.

Today, the DIC Group operates in an environment characterized by rapid, all-encompassing change. Realignment in the chemicals sector is progressing at a bewildering rate. Against this backdrop, in fiscal year 2015 our consolidated net sales edged down to ¥820.0 billion, while operating income rose 24.3%, to ¥51.1 billion.

Under our previous medium-term management plan, DIC105, we made progress in implementing strategies aimed at establishing a foundation for sustainable growth, namely, in restructuring our printing inks businesses in North America and Europe and ensuring a more balanced financial position. However, in terms of our strategy to create next-generation businesses, challenges remain.

## DIC108

In fiscal year 2016, we kicked off DIC108, our new mediumterm management plan. The vision for our future described in DIC108 is an extension of that outlined in DIC105, as are our overarching goals. We have positioned the new plan as the first phase of a growth scenario taking us up to fiscal year 2024, and will continue to press forward with efforts aimed at fulfilling our mission, "Through constant innovation, the DIC Group strives to create enhanced value and to contribute to sustainable development for its customers and society."

DIC108 outlines a medium- to long-term road map that pays heed to global megatrends while organizing what must be done between now and fiscal year 2018-the next milestone in our evolution-into basic strategies for business (comprising four business initiatives), cash flow management and the establishment of a solid management infrastructure. Guided by these strategies, the employees and executives of the DIC Group pledge to work with the aim of ensuring that we achieve our targets for fiscal year 2024. Of particular note, we will work to expand businesses that will drive growth, including thin-film transistor (TFT) LCs and high-performance materials such as functional pigments. We will also actively pursue opportunities for strategic investments (mergers and acquisitions (M&As), etc.), to further strengthen our capabilities in areas in which we have particular expertise. In addition, we will work to create next-generation businesses by promoting open innovation, enabling us to make effective use of outside resources, which will further increase research efficiency.

## Ensuring Sustainable Growth

As part of our commitment to realizing sustainable growth, we classify our sustainability initiatives into four regional groupings: Japan, Greater China, the Asia–Pacific region and the Sun Chemical Group. In recent years, awareness





(Left) Ceremony to celebrate the 40th anniversary of subsidiary Lidye Chemical Co., Ltd., in Taiwan (April 2015) (Right) Top management ESH audit at the Tokyo Plant (September 2015)

of social imperatives pertaining to environment, society and governance (ESG)-related issues has grown. This is evidenced by developments such as the Paris Agreement, adopted in December 2015, and Japan's Corporate Governance Code, which entered into force in June 2015, to which we, as a major corporation, are working to respond. As an organization with global operations, we also recognize the importance of welcoming diversity, ensuring safety and promoting effective supply chain management to create a solid foundation for sustainable growth.

Having declared 11 DIC Group sustainability themes and formulated theme-specific approaches, we are currently promoting a variety of related initiatives aimed at creating next-generation businesses in such areas as electronics, packaging, healthcare and low carbonization, through which we will endeavor to contribute to, among others, environmental protection, safety and security, and the realization of a smart society.

## The Future of the DIC Group

As a first step in formulating DIC108, we revisited our management concept, "The DIC WAY," which includes our mission and vision, and pondered the question of who we are and what role we are expected to play going forward. This process led us to articulate three key corporate values: "Making it Colorful," "Innovation through Compounding" and "Specialty Solutions." (For more information, please see page 1.) Having chosen a new brand slogan, "Color & Comfort," we pledge to work as one to promote sustainable growth. In these and all our efforts, we look forward to the ongoing support and guidance of our stakeholders.

Representative Director, President and CEO DIC Corporation

Yoshiyuki Nakanishi

# The DIC Way

The DIC WAY was formulated to represent the DIC Group's fundamental management philosophy. As a first step in formulating DIC108, DIC revised The DIC WAY to better reflect social imperatives, to create a simple, clear message, in line with which the Group will continue to promote efforts aimed at enhancing corporate value and achieving sustainable growth.

# The DIC WAY

# Mission

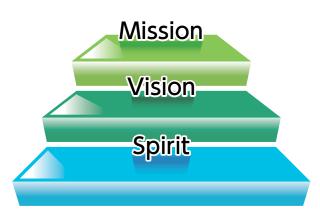
Through constant innovation, the DIC Group strives to create enhanced value and to contribute to sustainable development for its customers and society.

# Vision

Color & Comfort by Chemistry

# Spirit

Drive, Integrity, Dedication, Collaboration, Harmony



• Mission:	Our Mission defines what the DIC Group ultimately aspires to be. Enhanced values we strive to create are "dignity and trust," "customer satisfaction" and "harmony with society."
Vision:	Our Vision defines the broad direction in which the DIC Group's business must advance to achieve our Mission.
• Spirit:	Our Spirit sets out the specific principles of conduct that DIC Group employees should always honor and which should serve as their guideposts in order to achieve our Mission, including encouraging our employees to think and judge matters on their own before taking action.

# Branding

Having positioned 2016 as the inaugural year of its new branding program, the DIC Group is implementing a broad range of systematic, forward-looking measures directed at both internal and external stakeholders. As a first step, the Group pondered the question of what value it brings to its customers and what role it is expected to play. This process led to the establishment of a new brand slogan, which conveys the value that the Group brings to its customers, and to the articulation of three corporate values.

# Brand slogan

# Color & Comfort

Based on the Group's "Color & Comfort by Chemistry" management vision, the new brand slogan was chosen because it clearly and concisely conveys the value that the DIC Group brings to its customers and because its suitability for global use will encourage greater brand awareness across the Group.

"Color & Comfort" expresses the DIC Group's desire to help create a society that adds rich color and comfort to people's lives. Looking ahead, the Group will work to communicate the message of its new brand slogan in a consistent manner to both internal and external stakeholders.

# The DIC Group's Sustainability Program

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. Today, the DIC Group promotes a variety of sustainability initiatives worldwide and works to maintain an accurate grasp of social imperatives pertaining to ESG-related issues.

The DIC Group launched its corporate social responsibility (CSR) program in fiscal year 2007, identifying multiple key themes as a framework for its efforts. Having further clarified the overall direction of its sustainability-related initiatives, effective from fiscal year 2014 the Group changed the designation used across its program from "CSR" to "sustainability," which it feels is more appropriate for a globally active corporate entity.

## **Basic Sustainability Policy**

The DIC Group is dedicated to conducting its business 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.

DIC Group employees will continue working to deliver the value that its stakeholders—including its customers, suppliers, local communities, shareholders and investors, and employees—expect, showing ingenuity and a sense of responsibility. The Group itself will strive to remain an organization that contributes to sustainability for society and the global environment by capitalizing on its businesses to achieve unfaltering growth, thereby enhancing its own sustainability.

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

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 the 10 principles put forth by the United Nations (UN) and became a signatory to the United Nations Global Compact (UNGC).

Inaugurated in 2000, the UNGC is a voluntary initiative for companies that seek to achieve sustainable development worldwide. More than 13,000 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, and fulfill their social responsibilities in, 10 globally accepted principles in the areas of human rights, labor, the environment and the prevention of corruption.



# Three corporate values

# Making it Colorful

- DIC helps make life colorful -

# **Innovation through Compounding**

- DIC brings innovation to society through its core compounding technologies -

# **Specialty Solutions**

- DIC draws on its expertise and comprehensive strengths to offer solutions -

The DIC Group has summarized the value that it brings to stakeholders in the form of these three corporate values.

# New Medium-Term Management Plan: DIC108

Based on its mission, vision and corporate values, DIC formulated its new medium-term management plan, DIC108, which sets forth a growth scenario that outlines what needs to be done between now and fiscal year 2018 to achieve sustainable growth.

# The Future of the DIC Group

#### Mission

Vision

Through constant innovation, the DIC Group strives to create enhanced value and to contribute to sustainable development for its customers and society.

Color & Comfort by Chemistry

Three corporate values that will underpin efforts to realize our Vision

#### **Making it Colorful**

- DIC helps make life colorful -

#### **Innovation through Compounding**

- DIC brings innovation to society through its core compounding technologies -

#### **Specialty Solutions**

- DIC draws on its expertise and comprehensive strengths to offer solutions -

## **Growth Scenario and Positioning of DIC108**

										businesses
Ensure the sustainability of businesses			Create business models that address social imperatives •Electronics			Achieve sustainable growth by revamping business portfolio			Businesses that will drive growth	
				kaging						
<ul> <li>Responses to environmental concerns</li> <li>Rationalization</li> <li>Strategic investments (M&amp;As, etc.)</li> </ul>				althcare v carboi	nization					Businesses with stable earnings bases
2016	2017	2018		2019	2020	2021	2022	2023	2024	-
	DIC108			,	DIC111		$\mathbf{X}$	DIC114		$\rangle$

# **Basic Strategies**

Business	Business initiative (1): Expand businesses that will drive growth
Translate the growth scenario	Business initiative (2): Pursue opportunities for strategic investments (M&As, etc.)
into reality through four business initiatives	Business initiative (3): Rationalize operations in mature markets
maavoo	Business initiative (4): Create next-generation businesses
Finance	Ensure a balance among investment in growth, financial health and shareholder returns
Pursue an ideal financial	Budget ¥150.0 billion for strategic investments
balance through cash flow management	Keep debt-to-capital (D/C) ratio at around 50%
managomont	Increase dividend payout ratio to around 30%
Management Infrastructure Support globalization and increase	Operations: Strengthen technical, R&D, purchasing, SSC* and IT configurations globally
sophistication with the establishment of a solid management infrastructure	Corporate governance: Address challenges in accordance with the Corporate Governance Code

\* Shared services center

Growth attributable to

strategic investments (M&As, etc.) Next-generation

# Business Strategy: Translate the DIC108 growth scenario into reality through four business initiatives

Expand businesses that will drive growth (Contribution to annual operating income: ¥15.0 billion)

## High-performance materials (TFT LCs, functional pigments, PPS compounds and inkiet inks)

DIC will concentrate management resources on high-performance materials with the potential for market growth over the medium term and expand businesses by 1.7 times over the plan's three years.

#### **TFT LCs Functional Pigments** Focus on R&D for n-type TFT LCs Introduce new products in the area of processed pigments and Secure share of market for LCs for LCD manufacturers in expand sales by increasing production capacity Expand portfolio of pigments for color filters the PRC Increase market share by bringing new products to market Increase production capacity for pigments for optical materials · Expand sales of pigments for cosmetics PPS Compounds Inkjet Inks Expand sales for automotive applications Introduce new products · Establish global supply configuration · Water-based inks for high-speed laser printers Expand and improve sales and technical service facilities Inks for textiles Inks for coated papers Establish global production configuration Packaging materials (Gravure inks, flexo inks, packaging adhesives and films) DIC will work to offer distinctive and innovative solutions for customers and brand owners by providing one-stop services that tap into the DIC Group's extensive range of packaging-related materials and technologies. 2

## Pursue opportunities for strategic investments (M&As, etc.)

Capitalizing on a dramatic improvement in financial health under DIC105. DIC will budget ¥150.0 billion for strategic investments, including in M&As, over three years. In addition to expanding business domains through the creation of next-generation businesses, the Company will work to increase the sales of its businesses by taking steps to prepare for a future business portfolio overhaul, the aim of which will be to expand businesses that will drive growth, and by ensuring the sustainability of businesses with stable earnings, thereby translating DIC108's growth scenario into reality.

#### Business initiative 3 Rationalize operations in mature markets (Contribution to annual operating income: ¥11.0 billion)

## Publishing inks businesses in North America and Europe

DIC will seek to further enhance cost competitiveness by optimizing regional supply systems in line with production configurations streamlined under DIC105 and to ensure a sustainable business structure even in an environment characterized by falling demand.

### Mature businesses in Japan (Publishing inks, polymers and support departments)

DIC will implement a drastic restructuring in advance of an expected decline in demand and will allocate management resources to growth businesses and markets.

4

## Create next-generation businesses

DIC will address social imperatives by creating new value in such areas as materials for printed electronics, gas-barrier materials, health foods and algae-derived oils, as well as promote open innovation to overcome dependence on in-house resources and expand technical domains.

# Quantitative Targets of DIC108 The Company is targeting record-high operating income of ¥54.0 billion in the first year of DIC108, with ¥65.0 billion its target for the plan's final year.

2017 2015 2016 2018 Actual Target Target Target ¥870.0 ¥960.0 ¥820.0 ¥920.0 ¥65.0 ¥51.1 ¥54.0 ¥58.0 **Operating income** ¥37.4 ¥25.0 ¥30.0 ¥40.0 Net income 15.0% 9.0% 10.0% 12.0% ¥34.0 ¥120.0 Ordinary investments Strategic investments (M&As, etc.) ¥150.0 47% Around 50% 21% **Dividend payout ratio** Around 30%

\* D/C ratio: Interest-bearing debt / (Interest-bearing debt + Net assets)

(Billions of ven)



Sun Chemical Corporation
President & Chief Executive Officer Rudi Lenz



## Working for You: Meeting Customer Needs while Reducing Environmental Impact

Sun Chemical Corporation produces printing inks, pigments, coatings and specialty materials for major industries across Europe, the Americas, the Middle East and Africa. With sales of \$3 billion and over 8,000 employees, we operate 146 facilities in 37 countries. Sun Chemical made dramatic improvements in operating income throughout DIC105, and we will continue striving to meet and exceed the challenging DIC108 targets in our regions.

Sun Chemical's sustainability efforts are based on the concept



DIC Asia Pacific Pte Ltd Managing Director Kazunari Sakai



My feeling, in this the first year of DIC108, is that for us to achieve the medium-term management plan's targets it is crucial that we move closer to truly global management. Whether it be in implementing our business programs or developing management infrastructure, it will be difficult to realize progress unless we are global. I believe that the Asia–Pacific region has an important role to play as a touchstone for the Group's globalization.

The DIC Group's presence in the Asia-Pacific region comprises 19 Group companies in 12 countries and



DIC (China) Co., Ltd. Chairman and General Manager Hideki Inouchi

## Promoting the Strengthening of Marketing Functions and Responding to Demand through Selection and Focus

With a population of over 1.3 billion, the People's Republic of China (PRC) is seeing a sharp rise in purchasing power. The standard of living of the middle class is greatly improving, as is clearly illustrated through the tourist shopping sprees we hear so much about. Meanwhile, the problem of overproduction in the Chinese economy is a major issue, which has been particularly apparent in such sectors as cement, steel and coal. Economic growth is slowing, and this year's National People's Congress adopted a GDP growth target of between of eco-efficiency as defined by the World Business Council for Sustainable Development: "The delivery of economically competitive goods and services that satisfy customers' needs and bring quality of life, while progressively reducing ecological impact and resource intensity throughout the life cycle." In the past year, we have made progress on most of our metrics through careful selection of materials and manufacturing processes and through working proactively with government and industry trade groups. In 2016, we are making further progress toward this goal by also working closely with our suppliers to reduce the overall environmental footprint of their products and processes. Recent successes include:

- Switching to bio-sourced ethanol derived from corn
- Increasing the use of bio-sourced resins (tall oil or gum rosins) for publication inks
- Switching to reconditioned industrial containers for more and more of our packaging

territories. The region is a mixture of many ethnicities, languages and religions, and the level of development varies greatly. Many of these companies have fully local management teams. In many cases, the administrative manager of each company is also a local individual. Another feature of note is that there are many women in these companies' management teams. In other words, these companies really personify diversity.

Going forward, the challenge is how to facilitate collaboration at the regional level among such a diverse group of people. In such promising areas as packaging inks and adhesives, for example, we are promoting development and marketing based on a regionally unified product strategy. Our ability to develop a cooperative production Shifting supply of carbon black to a new process using significantly less energy

- Replacing our aging internal car fleet with more fuel-efficient vehicles
- Shifting internal distribution to intermodal (rail + truck) wherever feasible

We are committed to meeting our customers' needs, while never losing sight of the business essentials, which are reliable, ontime delivery; consistent product quality; dependable service; and groundbreaking innovation.

Sun Chemical's Pledge: As the world's top producer of inks, pigments and coatings, we will lead our industry by understanding and minimizing the life cycle footprint of our products' impact on the environment.

## **Sun Chemical Corporation**

configuration, including through the establishment of mother plants, will be a key factor in determining our success. On the administrative front, we are working to provide efficient, agile support for local operations.

Under DIC108, we will press ahead with these and other strategies with the aim of positioning DIC Group companies in the Asia–Pacific region as a model for the global DIC Group.

## DIC Asia Pacific Pte Ltd

6.5% and 7.0%—far lower than the double-digit growth seen in recent years.

What this tells us is that although overall growth is slackening, there are latent needs. If we can capture these needs, the PRC is still a market in which robust growth can be expected. In other words, we believe that there are significant business opportunities.

Even though economic growth in the PRC is slower than in recent years, in this the first year of DIC108 we are working to cultivate promising high-end markets for which DIC Group technologies are suited in line with two key DIC Group sustainability themes, namely, Business Models that Respond to Social Imperatives and New Technology Development and Value Creation. Through these efforts, we aim to contribute to the achievement of DIC108's targets.

With DIC108, the DIC Group's focus has shifted from improving its financial health to pursuing opportunities for strategic investments that will support growth. Accordingly, we will explore chances to expand investments, including M&A activities, in both the PRC and adjacent areas. To this end, we will work to reinforce our local marketing function.

Going forward, DIC (China) will work to identify businesses that enable us to further strengthen our marketing capabilities, focus resources on those businesses and concentrate efforts on locking in demand.

## DIC (China) Co., Ltd.

## The DIC Group's **Business Portfolio**

# Providing Value in Five Business Segments

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 five business segments: Printing Inks, Fine Chemicals, Polymers, Compounds and Application Materials. Through its Advanced Technology Sales Administrative Division., Life & Living Sales Administrative Division and Packaging & Graphics Sales Administrative Division-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.



# A Stable Business Since the Start

# **Printing Inks**

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 Product Division**

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



Outstanding color reproduction and reduced energy consumption

DAICURE HR series (High-sensitivity UV-curable offset inks)

As well as suitability for use with low-power ultraviolet (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)

*FINART* gravure inks combine superb image quality and suitability for high-speed printing, as well as respond to demand for the reduction of solvents in food packaging, thereby contributing to food safety and the environment.



### **Pigments Product Division**

Organic pigments

Liquid Crystal Materials Product Division Thin-film transistor (TFT) LCs Supertwisted nematic (STN) LCs

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



A marked increase in brightness and reduced LCD energy consumption

G58 series (Green pigments for color filters)

In manufacturing the G58 series of green pigments, DIC defied conventional wisdom by using zinc, rather than copper, as the central metal, which achieves a marked increase in brightness and reduces energy consumed by the liquid crystal display (LCD).



Responding to the evolution of LCDs

TFT LCs

The production of TFT LCs demands advanced technological expertise. DIC is one of only a few companies in the world with such expertise. DIC's technologies ensure it is able to provide products that respond to demands for faster response times and greater long-term reliability.

# **DIC's Second Core Business**

# Polymers

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

TFI

#### **Polymers Product Division**

Waterborne resins UV-curable resins Acrylic resins Epoxy resins Phenolic resins **Fluorochemicals** 

Polyurethane resins **Polyester resins** Plasticizers Methacrylate resins Unsaturated polyester resins Polystyrene Alkylphenols



Environment-friendly next-generation adhesives that respond to diverse needs

TYFORCE series (Moisture-curing hot melt adhesives)

This series of solvent-free adhesives delivers superb production efficiency and bonding strength. These resins have been adopted for a wide range of applications, including building materials, apparel and electronic components.



Technologies that facilitate the control of light for applications ranging from display cases to optical fibers

DEFENSA OP series (Low-refractive index UV-curable resins)

Used for optical fiber cladding and optical coatings, the DEFENSA OP series' low-refractive index UV-curable resins help improve the performance of optical fibers and the brightness of display cases.

# Compounds

New Value Created through Dispersion and Compounding Technologies



#### Liquid Compounds Product Division

Inkjet inks

Fiber and textile colorants and artificial leather colorants High-performance coatings and adhesive materials Coatings for optical films

#### Solid Compounds Product Division

PPS compounds High-performance compounds Plastic colorants High-performance optical materials

This segment leverages resin and pigment dispersion and compounding technologies accumulated since DIC's founding to provide products that respond to needs in the expanding global digital printing, automotive and electronics markets.



Helping customers realize outstanding color development and gloss

SunJet inkjet inks

Advanced DIC Group pigment dispersion technologies ensure excellent color development and a glossy finish. With a reputation for reliability, *SunJet* inkjet inks enjoy popularity in markets around the world.



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

*DIC.PPS* series (PPS compounds)

PPS compounds in the *DIC.PPS* series maintain excellent rigidity, strength and electrical insulating properties, as a result of which these compounds have found application in components for hybrid, electric and other environment-friendly vehicles as an alternative to metal materials.

# A Variety of Products Made Possible by the Integration and Application of DIC Technologies

# Application Materials



This segment encompasses a diverse range of products, including industrial adhesive tapes, hollow-fiber membranes and modules, and coextruded multilayer films, which are made possible through the integration of proprietary coating, printing, molding and other technologies.

## **Application Materials Product Division**

Industrial adhesive tapes Magnetic tapes and coated sheets Hollow-fiber membranes and modules Coextruded multilayer films Health foods and natural colorants Decorative boards, interior housing products and coatings for building materials Decorative sheets and decorative films Processed sheet molding compounds (SMCs) and bulk molding compounds (BMCs) Molded plastic products



Enhancing waterproof smartphone construction

DAITAC WS#84 series (Double-sided adhesive tapes for waterproof mobile communications devices)

One of the first series of waterproof tapes to be developed and marketed for waterproof smartphone construction, the *DAITAC WS#84* series continues to support efforts to enhance the ability of smartphones to resist water ingress.



A superfood that provides a balanced wealth of nutrients

DIC Spirulina

Spirulina is an edible blue-green algae rich in vitamins, minerals and ß-Carotene, as well as protein. Spirulina's nutritional value and popularity as an ingredient not only in health foods but also for culinary applications has earned it a reputation as a superfood.

# **Developing Innovative Products that Address Key Social Imperatives and**

Addressing issues related to climate change, energy, food security and disaster prevention is one of the most significant challenges facing the world today. The DIC Group is



# Inkjet Inks for Industrial and Office Printers



## Reduce environmental impact through on-demand printing

3Rs ("Reduce



To date, the printing of outdoor display graphics, banners, product packaging, printed materials in the workplace, textiles and other items has <u>used considerable</u> resources and energy and generated waste, thus exerting a negative impact on the environment. In recent years, the emergence of digital printers has fueled the popularity of on-demand printing, which allows items to be printed in the quantity desired at the time needed. The development and supply of inks optimally suited to different applications are thus essential to drive the further expansion of on-demand printing and reduce the environmental impact of on-demand printing.



## Aqueous inkjet inks that help reduce environmental impact for a variety of industries



On-demand inkjet printers use a variety of different inks. Aqueous inkjet inks, which are formulated with pigments dispersed in water and exert less of an impact on the environment than solvent-based products, have earned particularly high praise. However, obtaining a stable dispersion of pigments in water has traditionally been problematic, making it difficult to realize excellent color gamut and gloss. DIC has capitalized on its proprietary pigment dispersion technologies to resolve its challenge.

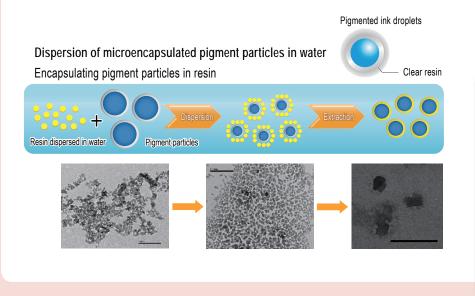
Conventional textile printing requires the production of printing plates for each design, making this a laborious, costly and time-consuming process that uses

Social

Imperatives

a significant amount of electricity and generates a considerable amount of wastewater. In contrast, inkjet printers eliminate the need for plates, facilitating low volume diversified printing and reducing electricity use. Moreover, pigmented inks can be used to print on diverse types of fabric, substantially reducing wastewater generated.

The DIC Group's inkjet inks lineup also includes UV-curable inks that are compatible with inkjet printers that use energy-efficient light-emitting diode (LED) light sources and solvent-based inks made with environment-friendly solvents.



#### KEY PERSON Of DIC

General Manager, Dispersion Technical Division 2 Satoshi Idemura

Safety /

Peace of mind

(00)



Highly information

iented society

#### We are providing integrated solutions that leverage DIC Group capabilities and meet advanced requirements.

Inkjet inks must meet the complicated requirements of printer and printhead manufacturers and as such we need to control the properties of picoliter-level droplets. Our competitive edge reflects our ability to provide integrated solutions that leverage the DIC Group's pigment dispersion and stabilization processes, as well as to design raw materials such as synthetic resins.

Industrial and office printers are rapidly improving in terms of speed and accuracy, providing an opportunity for us to extend value by optimizing our products, an effort that is supported by the evolution of resins and pigments and advanced evaluation techniques.

# **Respond to the Expectations of Stakeholders**

leveraging the power of chemistry to provide products that can help resolve such issues and further drive social sustainability.

Related information http://www.dic-global.com/ en/csr/special



QR Code access

Hollow-fiber membranes that facilitate the removal of gas from and dissolving of gas into liquids

# SEPAREL<sup>®</sup> Hollow-Fiber Membranes and Membrane Modules



## Eliminate gases dissolved in liquids, which can adversely impact various processes

Water pipes play a key role in a truly diverse range of situations, but gases dissolved in water can have many negative consequences. One of these is rust, formed when iron and oxygen react in the presence of water, which can shorten the useful life of plumbing pipes. Oxygen can be removed with chemicals, but some contain substances that are harmful to the environment. Another consequence of oxygen in liquid is the formation of bubbles. Bubbles forming in inkjet inks can hamper ejection from nozzles, damaging print quality, while in semiconductor fabrication bubbles in photoresists and developers can impede the formation of circuit patterns, causing defects. As these examples

indicate, there is a clear need for effective ways to remove gases dissolved in liquids, thereby reducing related resource and energy losses, as well as waste arising from product quality issues attributable thereto.



# Hollow-fiber membranes for degasification (removal of gases dissolved in liquid) and aeration (dissolving of gases into liquid)

In the late 1980s, DIC developed a proprietary hollow-fiber membrane made from a polyolefin. This membrane, which consists of a porous inner supporting layer and a nonporous outer layer called a skin layer, making it compatible with highly permeable liquids, also boasts high gas permeability and ultrafine hollow fibers, which maximize membrane surface in small spaces. One of the earliest applications for DIC's hollow-fiber membranes was oxygenators, which are used to dissolve oxygen into and remove carbon dioxide from blood during surgical procedures. Subsequently, DIC commercialized these membranes in hollow-fiber membrane modules, uses for which include removing oxygen from pipes in power plants, factories, office buildings and condominium complexes to protect against rust, thereby prolonging their useful lives. These modules are also used to prevent the formation of bubbles. In semiconductor fabrication, this minimizes the incidence of product defects and reduces waste, while in inkjet printing it prevents problems with ejection from nozzles.



SEPAREL® membrane modules are bundles of hollow-fiber membranes

#### DIC's proprietary hollow-fiber membrane facilitates the separation and removal of gas only (degasification) 180-240µm 30-40µm s-per-billi Liquid and gas flows Liquid Vacuum Hollow-fiber Gas molecules membran Degassed N<sub>2</sub> Dissolved N: Dissolution Gas molecule Gas flow aasified liquid Dissolved O<sub>2</sub> Ultrafine hollow fibers Skin layer Degassed O<sub>2</sub> Hollow fibers Thin (approx. 1 µm), with a high permeability rate Compatible with highly permeable liquids

Reduction of CO

Improvement

of convenience

Reduction of substances

hat harm the environmer

of **DIC** 

Head Researcher, Polymer Processing Technical Group 5, Polymer Processing Technical Division Shigeaki Fujieda

Better product

quality

Food loss

reduction

#### The secret is an exclusive dual-layer structure with a skin layer.

All aspects of the SEPAREL® membrane business-including production of hollow fibers, development of modules, commercialization and module production-are centered at the Chiba Plant. These products are a prime example of the comprehensive capabilities of the DIC Group. With recent advances in the speed and precision of semiconductor fabrication systems and printers and a commensurate increase in degasification levels, customers' quality expectations have become increasingly exacting. The higher the requirements for the removal of gases dissolved in liquid or for the dissolving of gases into liquid, the greater the value realized by SEPAREL® modules.

#### **Rich color and superior** safety contribute to the cosmetics industry

# **Pigments for** Cosmetics



## Develop color materials that meet the stringent safety and quality management standards required for use in cosmetics



Many people use cosmetics because doing so makes them feel more attractive and confident. Cosmetics also bring rich color to everyday life. The quality of cosmetics is influenced by multiple factors, including the materials used to impart color. Color materials for cosmetics can be of mineral, vegetable or synthetic origin. Many contain heavy metals, which in excessive concentrations can damage the skin. For this reason, many countries and regions have established safety standards for cosmetics. With population and economic growth in emerging markets expected to drive up demand for cosmetics in the years ahead, cosmetics manufacturers worldwide are coming under increasing pressure to adhere to pertinent laws and regulations and guarantee the safety of their products.



## Superior color materials that comply with safety standards, laws and regulations in countries and regions around the world



SunCROMA®

SunPURO

The SunPURO line's extremely

low heavy metal content levels have earned it certification under

France's ECOCERT\*, considered the global standard for ingredients

Proprietary technologies give

Soft-Tex pigments a highly uniform particle size and easy dispersion.

used in natural cosmetics.

Soft-Tex

DIC Group company Sun Chemical Corporation has 50-plus years experience in manufacturing organic and inorganic pigments for cosmetics and is recognized as being among the world's leading manufacturers of such products. The company's portfolio also includes pearlescent, metallic and other effect pigments. Sun Chemical products are the choice of cosmetics manufacturers worldwide, reflecting solid marks given its formidable product development capabilities, production technologies and knowledge of color, as well as its ability to comply swiftly with laws and regulations, as well as with safety standards, in different geographic markets. Known for its rigorous standards, particularly governing organic pigments, the U.S. Food and Drug Administration (FDA) has certified all Sun Chemical organic pigments for cosmetics. Sun Chemical's organic pigments for cosmetics are FDAcertified.

Sun Chemical became a subsidiary of DIC in 1986. Since then, the two companies have built a strong alliance in multiple fields. Recognizing the importance of strengthening collaboration with Sun Chemical and further maximizing synergies to achieve further growth, in January 2016 DIC established a dedicated department to handle pigments for cosmetics within its new Pigments Product Division. Under its new medium-term management plan, DIC108, the DIC Group has positioned pigments for cosmetics as a key growth business. Going forward, the Group will work to expand its pigments for cosmetics business in Japan, as well as advance into untapped markets in emerging economies and elsewhere.

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

Pigments Sales Department 1, Pigments Product Division, Fine Chemicals Segment Mari Samejima

I am working to expand sales channels with the aim of "Making it Colorful.

The DIC Group's brand slogan is "Color & Comfort." One of the corporate values outlined in our new medium-term management plan, DIC108, is "Making it Colorful." Both of these phrases really resonate with the value provided by color materials for cosmetics. Pigments for cosmetics may strike some people as an unusual fit for DIC, but these pigments are used in products for consumers, so enhancing recognition of the Sun Chemical brand name by expanding sales channels will also encourage familiarity with the DIC name.

### Sun Chemical's Lineup of Pigments for Cosmetics









The INTENZA line comprises hybrid pigments combining FDAcertified organic colorants and pearlescent effect pigments.

\* Based in France. ECOCERT is an independent certification authority that inspects and certifies products that comply with European standards for organic products



# Topic



# Aquacure Inkjet Inks Technology Delivers the Positive Print Characteristics of a Water-Based Ink



Today's core inkjet technologies—aqueous, solvent and UV-curable—perform perfectly well across a wide variety of products and applications. However, there are fundamental pros and cons with each chemistry. Being water-based, aqueous inks have strong environmental credentials, provide a wide color gamut, offer excellent resolution and are relatively inexpensive. However, printheads require increased maintenance, substrates need to be coated, which can cost more, and aqueous inks is order to be coated.

require lamination in order to be suitable for outdoor use.

UV-curable inks have superb media flexibility, offer high durability and can adhere to both uncoated stocks and other challenging materials such as vinyl, glass and wood. They cure almost instantly, enhancing image quality, reducing energy consumption and improving productivity. On the downside, UV-curable inks have a limited color gamut, the structured ink film produces a noticeably raised finish, and they need greater care in handling and transportation.

Solvent inks produce exceptionally durable finishes that are ideal for demanding outdoor applications. Nonetheless, the volatile organic compounds (VOCs) released as the solvent evaporates require a ventilated environment, making these inks the least environment-friendly option. They are also difficult to handle in a single-pass printer architecture, owing to the rate of evaporation at elevated temperatures and the inability to exercise inactive nozzles during printing.

In an ideal world, inkjet users want a solution that combines the characteristics of aqueous and UV-curable inks while at the same time providing consistent high-quality output with an extended color gamut. Such a hybrid composition would deliver odor-free prints, provide excellent adhesion to a wide range of media, and offer enhanced resistance and high flexibility. It would also be environment-friendly, with a reduced film weight, and have low migration properties.



Sun Chemical addressed this imperative with the introduction of *Aquacure*, a functional aqueous technology combining water-based and UV-curable solutions. Comprised of 60–90% water, *Aquacure* inkjet inks deliver the positive print characteristics of a water-based ink, including low film weights, lack of odor, and an impeccable health, safety and environmental profile. The UV-curable component provides the ink's versatility

and durability, as well as ensuring reliable jetting through the printhead. *Aquacure* technology delivers adhesion to a broad range of media, offers superb flexibility and has an extensive color gamut. The technology delivers significant advantages in the graphics sector, but can also achieve migration limits and compliance for primary food packaging in combination with the appropriate press design. Unlike 100% solids UV-curable inkjet inks, *Aquacure* can produce low film weights similar to those in conventional print processes.

#### **Environmental credentials** Up to 80% Key benefits A truly functiona water aqueous inkiet ink 80% ow profile ow film weight ligh quality output/resistant Reliable jetting performance fersatile across a range of cubstrate Based on unique aqueous chemistry All-new ink platform for future market ne Low migration (compliant) Low profile & low film weigh Low odour Hazard JaheLfree

# **VOICE** from the DIC Group

Business Director, Digital, Sun Chemical Corporation Peter Saunders

#### Aquacure provides a look and feel that converters and brand owners demand.

This newly developed aqueous chemistry offers functionality that digital printers have wanted from water-based technology and will have a positive impact on both well-established and emerging inkjet market segments. Most importantly, *Aquacure* uses between 70–80% renewable materials, is hazard- and odor-free, and is compliant for low migration packaging. *Aquacure* provides a look and feel that converters and brand owners demand. To date, tests involving key manufacturers have proven to be highly successful.



# **Corporate Governance**

Related information http://www.dic-global.com/en/about/governance.html QR Code access



### Basic Approach to Corporate Governance

The DIC Group has prepared a Policy on Corporate Governance in which it discloses its basic approach to corporate governance as follows: 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, the DIC Group also promotes ongoing measures to reinforce its management system and ensure effective monitoring thereof.

## Outline of Policy on Corporate Governance (Chapter Headings)

- ~ ~ ~
- Basic approach to corporate goveranance
- Securing the rights and equal treatment of shareholders
- Appopriate cooperation with stakeholders other than shareholders
- 4 Ensuring appropriate information disclosure and transparency
- 6 Responsibilities of the Board
- Object to the second second
- Other

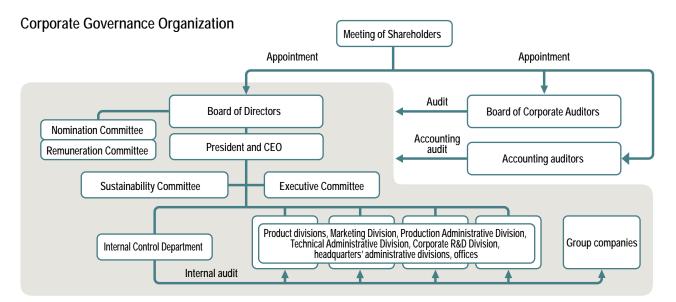
Outline of Policy on Corporate Governance (Chapter Headings): 🕮 http://www.dic-global.com/en/about/pdf/governance\_en.pdf

## Corporate Governance System

A company with internal auditors, DIC maintains a Board of Directors and a Board of Corporate 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, thereby accelerating business execution, and at 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 fourmember Board of Corporate Auditors, which includes two individuals—one a lawyer and the other an accounting scholar—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 control audits and environment and safety audits). The Board of Directors also hears annual reports on measures implemented in line with the policy on internal control.



# Overview of Materiality Analysis

The DIC Group conducts its operations in line with its mission, "Through constant innovation, the DIC Group strives to create enhanced value and to contribute to sustainable development for its customers and society." In recent years, the Group has seen a rapid increase in requests from a broad range of stakeholders, including shareholders and institutional investors, regarding disclosure of financial and nonfinancial information. Stakeholders today place particular emphasis on information that measures performance from the perspective of critical ESG-related issues. Accordingly, the Group has abstracted and analyzed material issues, that is, issues with potential to affect its performance, and has identified those of particular significance.

In addition to ensuring proper prioritization, the DIC Group is taking steps to effectively and efficiently address these issues. Guided by its DIC108 medium-term management plan, which commenced in fiscal year 2016, and by its long-term growth scenario, the Group will continue working to ensure that these efforts are beneficial to the management of its businesses and that they respond to the expectations of stakeholders.

# (1) Materiality Analysis Process

#### Abstraction of Issues

DIC abstracted issues of particular significance for the DIC Group based on the Global Reporting Initiative (GRI)'s G4 Sustainability Reporting Guidelines; its own sustainability themes (Group sustainability initiatives take into account ISO 26000); and issues delineated in DIC108, The DIC WAY or added by Sustainability Committee members, which it divided into three groupings: Environment (E), society (S) and governance (including economic issues) (G).

#### Materiality Analysis

Sustainability Committee members and heads of business units that spearhead the implementation of initiatives related to sustainability themes played a central role in assessing the materiality of the abstracted issues. This assessment was carried out from the twin perspectives of importance to DIC Group businesses and importance to stakeholders. Based on this, and having reviewed the results of assessments conducted by senior management at Group business units in the United States, Asia and elsewhere, the Company determined materiality for the DIC Group.

#### (a) Material importance to DIC Group businesses

DIC assessed issues with the potential for current or future impact on DIC as an organization, giving consideration to both potential risks and business opportunities.

#### (b) Material importance to stakeholders

The DIC Group recognizes five key stakeholder groups (customers, suppliers, local communities and society, employees, and investors). Assessments looked at level of interest on the part of stakeholders and potential impact.

With the aim of accurately identifying challenges for individual business units, DIC began by analyzing materiality for one of its core businesses. The Company is currently conducting materiality analysis for the Group as a whole.

## (2) The DIC Group's Materiality Matrix

DIC has organized the issues abstracted and assessed through the process outlined above into 22 DIC general materiality categories, as shown in the table below. The Company plans to periodically review and amend its analysis of materiality while incorporating the opinions of external stakeholders and will report on the progress of these activities as necessary in this document beginning in fiscal year 2017.

Environment (E)	<ul> <li>Practical application of measures to reduce environmental impact</li> <li>Contribution to the realization of a low-carbon society</li> <li>Promotion of products and services that contribute to environmental protection</li> </ul>				
Society (S)	<ul> <li>Ability to foster and strengthen global human resources</li> <li>Promotion of diversity</li> <li>Respect for human rights</li> <li>Efforts to address needs engendered by an aging society and falling birthrates</li> </ul>	<ul> <li>Promotion of occupational health and safety and consumer health</li> <li>Contributing to colorful and comfortable lifestyles</li> <li>Harmony with and contribution to society</li> <li>Enhancement of brand strength/reputation (evaluation)</li> </ul>			
Governance (including economic issues) (G)	Response to the growth of digital businesses     Response to economic globalization/efforts to reinforce governance     Promotion of supply chain management     Improvement of quality management capabilities     Efforts to increase productivity     Efforts to reinforce marketing	<ul> <li>Provision of solutions</li> <li>Innovation through compounding</li> <li>Efforts to strengthen global technology development capabilities</li> <li>Creation of next-generation businesses</li> <li>Promotion of open innovation</li> </ul>			

#### The DIC Group's 22 Materiality Categories

# DIC Group Sustainability Initiatives Sustainability Report

Sustainability Framework and Themes The DIC Group's sustainability framework comprises 11 key themes. The Group has 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, and clarified the positioning thereof. Each fiscal year, the Group formulates targets and activity plans for each of these themes.

Business models that respond to social imperatives ..... P43

New technology development and value creation ...... P44 Harmony with the community and social contributions ...... P45

Communication with stakeholders ..... P47

Environment, safety and health P29 Quality P38

Human resources management ..... P39

Sustainable procurement ..... P42

Compliance P26

Risk management P26

Information security ..... P28

# Themes that demonstrate unique capabilities (A)

Core and category-specific themes (Themes that combine elements of (A) and (B)

Basic themes (B)

> Expanding the Scope of Sustainability Initiatives

To guide its efforts to promote sustainability as an integral part of its business activities, the DIC Group formulates theme-specific medium-term targets in line with its basic sustainability policy and creates annual Group activity plans. The Marketing Division, the Technical Administrative Division and individual product divisions, sites and overseas and domestic DIC Group companies are then charged with pursuing effective sustainability programs by formulating their own annual activity plans, ensuring that the Group's 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 on related matters as a vital component of corporate management.



# **Toward Fair and Transparent Corporate Activities**

Related information ŴE

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



# Core and Category-Specific Themes

### **Basic Approach to Compliance**

Compliance in the DIC Group encompasses not only obeying laws but also acting in a manner that is in keeping with social norms and the expectations of customers, communities and other stakeholders. With the aim of ensuring sustainable growth for businesses that are both fair and transparent, DIC formulated the DIC Group 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.

# The DIC Group Code of Business Conduct

The DIC Group completed the DIC Group Code of Business Conduct in July 2014. The code not only mandates compliance with national laws and international rules but also presents 10 principles essential to the professional conduct of DIC Group employees. The DIC Group Code of Business Conduct has since been translated into 25 different languages to ensure that DIC Group employees worldwide share the Group's values and commit themselves to doing what is right, as well as to acting with common sense and an understanding of individual responsibilities, in all aspects of their work. DIC Group Code of Business Conduct: DIC Group Code of Business\_conduct\_en.pdf

# Initiatives to Promote Compliance

In addition to the DIC Group Code of Business Conduct, the Group promotes compliance through the following initiatives:

- Provision of training focused on legal issues to improve compliance awareness for employees at point of hire, when promoted and before overseas transfers
- Appointment of compliance officers at all regional headquarters—DIC Corporation (Japan), Sun Chemical Corporation (the Americas and Europe), DIC (China) Co., Ltd. (the PRC) and DIC Asia Pacific Pte Ltd (Asia and Oceania)-to spearhead global compliance efforts

The DIC Group vows that it will not violate the principles of the DIC Group Code of Business Conduct, even if such a violation would appear to profit the Group. As a corporate citizen, the Group also pledges to respect social norms and act in a sound and socially acceptable manner.

# Establishing and Operating a Whistle-Blowing System

The DIC Group has established a whistle-blowing system through which one can directly report an issue or question regarding compliance to the division responsible for compliance. Since fiscal year 2014, the Group has maintained whistle-blowing hotlines that can handle reports in the languages of more than 160 countries. The Group has also devised strict rules under this system to protect whistle-blowers from retaliation, and is working to ensure the system functions in a proper manner.

When a report is received, the Group responds swiftly and appropriately, giving due consideration for pertinent laws while also incorporating internal and external opinions, to promptly identify and correct misconduct and other compliance violations as quickly as possible.

# **Risk Management**

Reducing Business Risks and Preventing the Recurrence of Incidents Related information





### **Basic Approach to Risk Management**

The DIC Group undertakes risk management initiatives with the aim of appropriately and flexibly addressing changes in its operating environment and the diversification of risks, and of swiftly mitigating damage. The Group recognizes risks in three principal categories: externally caused risks that are beyond its control, corporate risks that can be prevented and business risks that should be handled by the relevant division/departments. The Risk Management Subcommittee, which is a subordinate committee of the Sustainability Committee, oversees management of these risk responses.

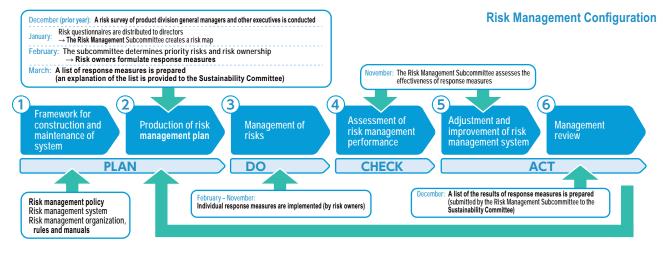
# **Risk Management Policy**

The DIC Group first introduced risk management initiatives in 2001 by creating the Compliance Committee and setting up reporting channels. Following the establishment of the Risk Management Subcommittee in May 2012, the Group undertook initiatives aimed at responding to serious natural disasters and promoting business continuity management (BCM). Since fiscal year 2014, the Risk Management Subcommittee has focused on establishing a risk management policy and a risk management system, efforts that are designed to further enhance corporate value Groupwide. In a bid to ensure the effective and sustainable implementation of initiatives, in January 2015 the Group introduced a newly formulated risk management policy.

# **Risk Management System**

In the process of formulating the risk management policy, the Risk Management Subcommittee established the DIC Group Risk Management System. This system starts by identifying key risks through a questionnaire, sustainably reducing risks by encouraging use of the plan-do-check-act (PDCA) cycle, and having management drive improvements and assessments. The Group has positioned fiscal years 2014 and 2015 as the first phase of Groupwide risk management initiatives predicated on the new system. Administrative divisions in DIC's corporate headquarters in Japan, which together constitute the Risk Management Subcommittee, and other divisions/departments, which are organized vertically according to function, will determine departments to oversee key risks and deploy countermeasures by collaborating with other relevant departments.

Having commenced risk management initiatives in Japan, DIC is expanding the focus of such efforts while at the same time promoting awareness of its basic risk management policy and the risk management system across the global DIC Group.



# BCM

The DIC Group accounts for all risks with the potential to interrupt business continuity through BCM. These risks include natural disasters such as large earthquakes and floods; influenza and other pandemics; explosions, fires, leaks and other plant accidents; and major corporate scandals. The Group comprehensively estimates the probability of each risk and its impact on management, prioritizing response measures for more significant risks.

In Japan, the Group deploys ongoing natural disaster response measures. These include maintaining headquarters functions and task force framework, support measures for disaster-stricken areas, and producing and renewing business continuity plans (BCPs) for each key product.

# Reinforcing Governance at Subsidiaries

The DIC Group endeavors to reinforce governance at subsidiaries, and has constructed an organizational operations support framework to ensure effective management of subsidiaries as well as foster their sustainable growth. The Group also facilitates and maintains internal controls as a risk management system that matches business scale, characteristics and other features distinctive to each subsidiary.

## **VOICE** from the DIC Group

## We are advancing BCP initiatives by holding response simulation meetings.

For a long time, the Saitama Plant was the Group's only facility producing LCs. In November 2013, we established a second LC production facility, in Qingdao, in the PRC, to accommodate business globalization and increased BCP requirements from customers. While these plants normally produce LCs with different product numbers, they are in fact mutually interchangeable as their facilities are basically the same. We resolved to fully harness the capabilities of the two facilities by rolling out BCP activities at the Qingdao Plant beginning in fiscal year 2015. Local understanding of BCP was initially very low, but we created a manual based on the one in use at the Saitama Plant, heeding advice that what is important is to keep anticipating risks and considering effective ways to address them. We are endeavoring to embed BCP activities as part of the culture at the Qingdao Plant by conducting regular meetings to simulate addressing individual risks.



Manager in charge of global production, Liquid Crystal Material Supply Department, Saitama Plant Takumi Yanagida

# Initiatives to Ensure Information Security

Related information we

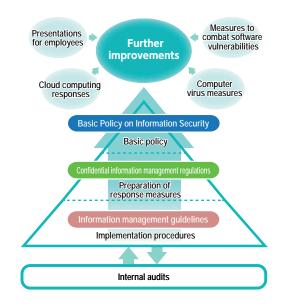
http://www.dic-global.com/en/csr/ philosophy/management/security.html



# Core and Category-Specific Themes

## Basic Approach to Information Security

The DIC Group has positioned information security as a key management priority, and established a Basic Policy on Information Security, which is founded on its recognition that protecting information assets that belong to or are managed by the Group is essential to its ability to conduct business. In line with this policy, the Group formulated and deployed confidential information management regulations, and information management guidelines. These were prepared to ensure that directors and employees properly use the Group's information assets in the course of business and appropriately handle confidential information. The Group will pursue continued improvement by conducting internal audits and confirming current issues to identify risks.



# Globally Maintaining and Enhancing Information Security

The DIC Group's regional headquarters for the Asia–Pacific region and Greater China, which are located, respectively, in Singapore and in the PRC, are spearheading the deployment of confidential information management regulations and information management guidelines and developing information management systems. In Europe and the United States, the DIC Group is reinforcing information security by sharing IT infrastructure risks, while in Japan the Group is updating rules to address security threats arising from cloud computing, smart devices\* and other emerging technologies, and intends to continue revising rules in light of changing work practices and other developments attributable to the progress of digitization. Preparations are also under way to deploy an e-learning program regarding the information management guidelines Groupwide.

\* "Smart device" is a generic term for information devices other than PCs, mainframe computers, workstations and other conventional computing platforms.

# Safeguarding Information Security Environments in Asia and Oceania

In fiscal year 2015, the DIC Group began building a unified security system across Asia and Oceania with the aim of, among others, combating computer viruses and software vulnerabilities. Through these and other efforts, the Group continues working to safeguard information by reinforcing information infrastructure.

## **VOICE** from the DIC Group

#### Our efforts focus on enhancing information security in Southeast Asia and Oceania.

I help enhance IT environments in Southeast Asia and Oceania, including maintaining and improving information security, consolidating IT infrastructure and further aligning and expanding the operational and maintenance structure of our SAP system.

Because we are in charge of overseeing subsidiaries in the region, we sought to deploy confidential information management regulations, as well as information management guidelines, among regional subsidiaries. As a regional headquarters that coordinates 16 subsidiaries in 10 countries with diverse cultures and customs, we will continue working to improve information security by, among others, unifying security measures in the region.



Regional Chief Information Officer, DIC Asia Pacific Pte Ltd Hidefumi Ito

# Environment, Safety and Health (ESH)

# Toward the Achievement of a Sustainable Society

Related information web

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



## Promoting Responsible Care

#### **Basic Philosophy**

As a company that manufactures and sells chemical substances, DIC sets standardized safety regulations for ESH initiatives. The Company is working to exceed regulatory standards and fully disclose results. Annual measures augment its core policy.

# Initiatives in Fiscal Year 2015

In fiscal year 2015, the DIC Group engaged in Responsible Care initiatives based on the following plan.

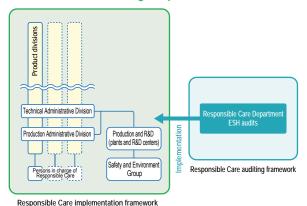
The DIC Group's Responsible Care activity plan for fiscal 2015:

- Occupational health and safety/disaster prevention
   In line with the DIC Group's ultimate objective, which remains the achievement of "ZERO accidents," set target for reducing the incidence of occupational accidents for fiscal year 2015 at on a regional basis (Japan, Sun Chemical Group, Greater China, Asia–Pacific region) and implement related initiatives
- Environmental protection
   In line with the DIC Group's goal of reducing its impact on the environment, set targets for and implement initiatives aimed at reducing environmental impact on a regional basis (Japan, Sun Chemical Group, Greater China, Asia–Pacific region)
- Safety in logistics Promote the provision of information pertinent to the safe transport of chemical substances
- Chemical substance and product safety Provide stakeholders with information to facilitate the appropriate handling of products throughout their life cycles
- Dialogue with stakeholders Report on the results of the DIC Group's Responsible Care initiatives via the DIC Report
- Management system Make use of the plan-do-check-act (PDCA) cycle in prompting Responsible Care initiatives Cultivate human resources to fill ESH and quality-related positions
- Compliance Comply with environmental and ESH and quality-related laws, rules and agreement

Framework for Promoting Responsible Care

Each year, the DIC Group defines priority issues to address and uses the PDCA cycle in voluntary initiatives at the Group company, plant and research laboratory levels. The Responsible Care Department provides support for these initiatives to advance their progress and conducts regular audits to ensure compliance and improve safety and environmental performance.

#### Framework for Promoting Responsible Care



# **Responsible Care Auditing**

#### **Basic Approach**

Responsible Care Department specialists with expertise, experience and auditing capabilities regularly collaborate with executive officers to audit Responsible Care initiatives at Group companies. DIC's president and CEO and the executive vice president take part in ESH audits at many sites each year to enhance Responsible Care performance across the DIC Group.

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

# Audits in Fiscal Year 2015

In fiscal year 2015, the Group conducted Responsible Care audits at 13 DIC sites and 13 domestic Group companies, as well as at 14 companies in Greater China, three in the Republic of Korea (ROK) and 16 in the Asia–Pacific region. As well as assessing the operational status of management systems, the audits included a greatly improved self-assessment checklist that covered 35 questions for seven items in environment, health and occupational safety.



DIC Graphics Chia Lung Corp.

# disclose results.

DIC is a signatory to the International Council of Chemical Associations' Responsible Care Global Charter

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**DIC Corporation** 

# Occupational Safety and Health

#### **Basic Approach**

As a responsible member of society and a company that manufactures and 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 with the aim of ensuring occupational safety and health.

# Principal Initiatives in Fiscal Year 2015

#### Making Regional Data Visible with Monthly Reports

The DIC Group conducts diverse businesses in accordance with a wide range of national and regional legal systems, working environments and practices, factors that cause the risk of accidents and disasters to vary. Accordingly, the Group has established appropriate benchmarks for each region. In fiscal year 2015, DIC established a system to aggregate monthly occupational safety and health data for each company in Greater China and the Asia–Pacific region as a monthly report, making it easier to swiftly identify and compare working hours, number of accidents leading to workdays lost, occupational accident frequency rate and other monthly data and to further enhance regional performances.

2 Reducing Risks

By understanding potential risks in production processes, facilities and devices, and the hazards of chemical substances, the DIC Group systematically prepared initiatives to prevent accidents and occupational injuries. The Group also creates risk assessment guidelines when deploying new or modified equipment or changing production processes to continue risk reduction activities.

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

The DIC Group regularly trains 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 its Occupational Accident Case Studies database. In recent years, the Group has focused on a risk prediction training technique called Kiken Yochi Training (KYT) ("hazard prediction training") and on hands-on safety training.

#### **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 Japan, the DIC Group initiated a full-fledged hands-on safety training program in 2012 and in 2014 opened the Saitama Hands-On Safety Training Center, a facility boasting equipment that allows the simulation of an array of accidents, with the goal of fostering skilled safety personnel by incorporating training in new employee and rank-specific training programs. In fiscal year 2015, the Group downsized six types of hands-on equipment for a mobile initiative. Overseas, the Group has worked to establish permanent training facilities and introduce hands-on safety training equipment in the PRC and the Asia–Pacific region.

A downsized hands-on machine for static generation and control



Experiencing being caught in a chucking apparatus

## **VOICE** from the DIC Group

#### More visible data should increase awareness.

I expect operations in Greater China and the Asia–Pacific region to objectively evaluate their strengths and weaknesses from the monthly reports so that they can improve themselves and bolster their activities. The occupational accident frequency rate (number of workdays lost per million work hours) is an important benchmark for the DIC Group. More visible data will likely translate into results by motivating each company into action. Collaboration between DIC and regional Group companies should ultimately enhance overall Responsible Care activities by reflecting barometers from more specific improvement efforts.



**Basic Themes** 

#### 5 Holding Safety Officers' Conferences in Greater China and the Asia–Pacific Region

DIC undertakes support initiatives at overseas Group companies by holding safety officers' conferences in Greater China and the Asia–Pacific region. From fiscal year 2015, DIC began holding these conferences every year instead of biannually. Gatherings were convened in Guangzhou in March, Vietnam in October and Qingdao in December.

#### Status of Occupational Accidents

In fiscal year 2015, the number of occupational accidents at DIC and DIC Group companies in Japan increased by one each (since fiscal year 2008, the DIC Group has deployed the DART rate\*, a common indicator used in various countries, with the aim of improving the effectiveness of its safety initiatives). There was one fatal accident at a DIC Group unit overseas. The Group will continue to promote occupational safety and health initiatives going forward with the aim of preventing the occurrence of occupational accidents.

\* The Days Away, Restrictions and Transfers (DART) rate is calculated as N/EH 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.)

#### Workdays Lost Due to Occupational Accidents (Fiscal Year 2013–Fiscal Year 2015)

	DIC			DIC Group (Japan)			DIC Group (Global)		
	FY2013	FY2014	FY2015	FY2013	FY2014	FY2015	FY2013	FY2014	FY2015
Number of workdays lost	2	0	1	6	4	5	84	80	88
Frequency rate	0.338	0.000	0.181	0.622	0.429	0.556	-	2.133	2.375
Severity rate	0.001	0.000	0.005	0.018	0.006	0.018	-	-	-
DART rate	3.5	0.1	1.3	16.0	9.6	6.2	17.8	20.3	21.8

#### Occupational Health

The DIC Group handles a broad range of chemicals, including specified chemical substances and organic solvents. To safeguard the health of employees handling these chemicals, the Group regularly conducts health checkups and environmental measurements, and modifies and improves working conditions as needed. Industrial physicians, health supervisors and other experts inspect workplaces to manage employee health.

# Security and Disaster Prevention

#### **Basic Approach**

In addition to establishing a security management system, 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.

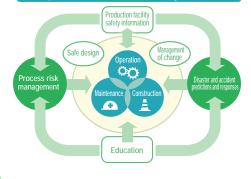
## Facility Safety Assessment

#### Assessment Procedures

DIC Group production facilities have an array of equipment, ranging from units where chemical reactions are conducted to machine presses and other processing equipment. When modifying processes or upgrading/replacing equipment, the Group assesses safety at every stage, from process design and construction through to operation, maintenance and final disposal. In fiscal year 2015, DIC revised risk assessment guidelines for machinery and equipment to encourage greater understanding and prepared educational materials to prevent static electricity accidents.

#### Accident and Disaster Analysis and Timely Information

Conceptual Illustration of DIC's Safety Infrastructure



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.

#### Initiatives to Enhance Safety Competency

DIC introduced a safety assessment system in fiscal year 2013 as a means of objectively evaluating and enhancing its safety capabilities. This system was developed by the Japan Society for Safety Engineering (JSSE) and engineers in the petrochemicals industry as a common benchmark and is currently used by the 21 major corporations in Japan that jointly established the Safety Competency Enhancement Center. In fiscal year 2015, the Safety Competency Enhancement Center formulated a system for evaluating processing sites and a prioritized version of the system. DIC participated in this effort.

# Safety Management in Logistics

The DIC Group commissions logistics firms to transport its chemical products. In Japan, these firms use containers that comply with the Fire Service Act and other transportation laws, as well as with related United Nations' standards. The Group supplies information needed to display labels complying with GHS<sup>\*1</sup> as well as provides SDSs and other documentation to ensure safe shipping in Japan and overseas. DIC endeavors to maintain and enhance safety by requiring transport personnel to carry Yellow Cards<sup>\*2</sup> to ensure proper responses in the event of an emergency.

\*1 GHS: Globally Harmonized System of Classification and Labelling of Chemicals

<sup>\*2</sup> 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 an accident occurs. It provides contact details to ensure proper responses by transportation companies, firefighters and police officers if an accident occurs during the transport of chemical substances. Transport personnel must carry these cards at all times.

#### **Basic Approach**

Climate change, a principal cause of which is global warming, is an increasingly pressing issue for the entire world. DIC included initiatives aimed at reducing greenhouse gas emissions from its production facilities, offices and research facilities in its annual sustainability policy for fiscal year 2015. The Company is also currently implementing initiatives to reduce its consumption of energy, and thus its emissions of CO<sub>2</sub>.

- 1 Undertake energy-saving initiatives Groupwide
- 2 Deploy effective strategies through working group activities
- Operate energy-saving cogeneration systems (combined heat and power generating facilities)
- 4 Employ energy from renewable resources (biomass, wind power and solar power) at suitable sites
- 5 Extend energy-saving initiatives to DIC Group companies overseas

#### Framework for Promoting Energy-Saving Initiatives

DIC and DIC Group companies in Japan have established energy-saving promotion committees at each of their production and R&D sites. Committee activities include confirming the progress of initiatives, engaging in discussions and conducting patrols. DIC has also set up an energy-saving working group comprising members chosen from each production facility that fosters the exchange of information, research pertaining to new items and the Groupwide implementation of effective measures. This combination of site- and Group-level initiatives forms the framework under which the DIC Group works to reduce CO<sub>2</sub> emissions.

DIC Group companies overseas promote a wide range of independent energy-saving initiatives. The Production Management Department provides support on multiple fronts, including the deployment of management systems and the training of employees.

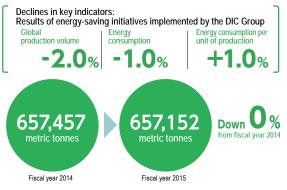
# Principal Initiatives in Fiscal Year 2015

#### Energy Consumption and CO<sub>2</sub> Emissions by the Global DIC Group

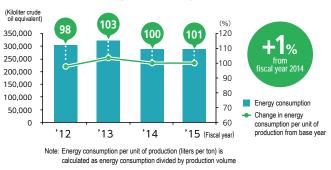
The DIC Group views energy consumption per metric tonne of production as an important measure of its energy efficiency. In line with a 2.0% decline in production volume from a year earlier, the Group reduced energy consumption in fiscal year 2015 by 1.0%, calculated in kiloliters of crude oil. This amounted to 285,557 kiloliters, from 288,452 kiloliters a year earlier. Energy consumption per unit of production rose 1.0%, to 149.89 liters/metric tonne, from 148.40 liters/metric tonne in fiscal year 2014. The changes reflected lower volumes for printing inks and polymers and higher production volumes for pigments and PPS products. Another factor was increased energy consumption not contributing to production, notably from the expansion of floor space in clean rooms to support quality improvement efforts. CO<sub>2</sub> emissions were 657,152 metric tonnes, down from 657,457 metric tonnes in fiscal year 2014.

In fiscal year 2015, the Group began identifying and incorporating energy consumption and CO<sub>2</sub> emissions at 21 Group offices and research facilities in Japan. Calculated on the same basis as in fiscal year 2014, energy consumption per unit of production by the DIC Group in Japan in fiscal year 2015 was up 0.6% from the previous period, while CO<sub>2</sub> emissions, at 654,457 metric tonnes, were down 0.5%.

#### Global CO<sub>2</sub> Emissions in Fiscal Year 2015



Global Energy Consumption and Change in Energy Consumption per Unit of Production from Base Year (Fiscal Year 2011)



#### Energy-Saving Initiatives in Japan in Fiscal Year 2015

All plants and R&D sites endeavor to conserve energy by implementing initiatives aimed at saving energy, improving the efficiency of production methods and shortening process times.

Examples include employing highly efficient lighting and air conditioning and measures to cut waste; introducing energy-saving controls on pumps and blowers; using more efficient compressors and implementing measures to reduce pressure losses; promoting measures to improve the power factors of electric equipment; adopting high coefficient of performance (COP) chillers and measures to prevent cold and hot water supply waste; reducing boiler fuel through the recovery of waste heat; and ensuring appropriate warming times and temperatures for raw materials.

In fiscal year 2015, these initiatives reduced energy consumption by 2,506 kiloliters (crude oil equivalent, with an associated reduction in CO<sub>2</sub> emissions of 5,592 metric tonnes), equivalent to 12,530 200-liter drums of crude oil, or 2.2% of total energy consumption by the DIC Group in Japan in the period.

#### **Results of Energy-Saving Initiatives in Japan in Fiscal Year 2015**

	Number of initiatives	Reduction in energy consumption (kl)	Reduction in CO <sub>2</sub> emissions (metric tonnes of CO <sub>2</sub> )
DIC	396	1,745	4,073
DIC Group companies in Japan	97	760	1,520
Total	493	2,506	5,592

493 energy-saving initiatives accounted for a reduction in energy consumption equivalent to 12,530 200-liter drums of crude oil



#### Improving Yields by Expanding Use of System to Enhance the Visibility of Energy Consumption

To optimize the use of electric power on an individual facility basis, DIC developed a system that measures, monitors and verifies waste and irregularities in use, thereby enhancing the visibility of energy consumption. Initially installed at the Hokuriku Plant, the system has since been rolled out at DIC sites across Japan. In fiscal year 2014, a system to enhance visibility, which also analyzes energy consumption during different production processes, was installed on the V, C and B production floors of the Chiba, Kashima and Sakai plants, respectively, to reproduce optimum yields for materials inputs. One outcome of efforts to enhance the visibility of energy consumption was an increase in the number of categories of Scope 3\*, in which DIC reports indirect emissions of CO<sub>2</sub>, from one ("upstream transportation and distribution") in fiscal year 2012 to six (including "capital goods" and "waste from businesses") in fiscal year 2013.

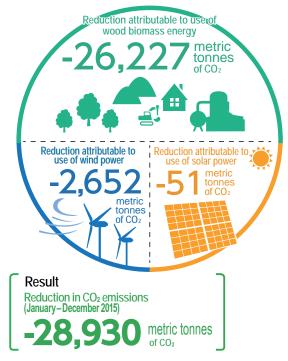
#### Increasing Independent Electric Power Generation through Cogeneration and the Use of Renewable Energy

Cogeneration systems burn fuel to drive turbines, facilitating the production of electric power and the recovery and reuse of waste heat (steam and hot water), thereby improving energy efficiency. With cogeneration systems already in operation at five domestic plants (Chiba, Shiga, Saitama, Gunma and Tokyo), in autumn 2015 DIC installed a natural gas turbine–powered cogeneration system with a capacity of 1,700 kWh at its Kashima Plant.

The Kashima Plant also boasts extensive facilities that facilitate the use of energy from renewable sources, including a biomass boiler (generating capacity: 4,000 kW and 30 metric tonnes of steam per hour), two wind power facilities (each with a generating capacity of 2,300 kW) and a solar power generation facility (100 kW). By combining these facilities, DIC aims to achieve an optimal power mix of purchased electric power, cogeneration systems and renewable energy. In fiscal year 2015, the biomass boiler's operating rates were reduced owing to maintenance. As a consequence, renewable energy usage volume declined 16.1% from a year earlier, to 12,524 kiloliters (11.5% of the DIC Group's energy consumption in Japan). The Group's CO<sub>2</sub> emissions in fiscal year 2015 thus dropped 28,930 metric tonnes.



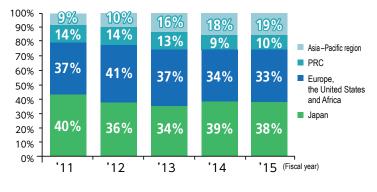
Natural gas turbine-powered cogeneration system at the Kashima Plant CO<sub>2</sub> Emission Reductions at Kashima Plant (January–December 2015)



#### 4 Energy Consumption and CO<sub>2</sub> Emissions by the DIC Group Overseas

Despite a 2.4% decline in production volume and the impacts of energy-saving initiatives based on management by objectives (MBO), the energy consumption of DIC Group companies overseas was unchanged. Energy consumption per unit of production increased 2.5%, while CO<sub>2</sub> emissions rose 1.4%, to 5,748 metric tonnes. In light of these results, in fiscal year 2016 DIC and DIC Group companies overseas will focus more on ways to prevent global warming through more extensive energy-saving activities, collaborating closely with DIC's Production Management Department. The prime factors behind this were surging pigment production in Indonesia and higher energy consumption per unit of production at sites in India, the PRC (Hainan) and Taiwan (Taipei).

#### Proportional Changes in CO<sub>2</sub> Emissions by Region



#### **Results of Energy-Saving Initiatives Overseas in Fiscal Year 2015**

Region	Number of initiatives	Reduction in energy consumption (kl)	Reduction in CO <sub>2</sub> emissions (metric tonnes of CO <sub>2</sub> )
Asia–Pacific region	47	327	760
Greater China	22	151	337
Americas and Europe	8	299	691
Total	77	777	1,788

#### Asia–Pacific Region

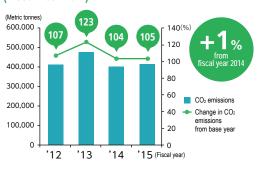
In May 2015, energy officers from 19 sites in 11 countries in the Asia–Pacific region gathered in Indonesia for a biennial energy management conference. Efforts have also started recently in the region to check on energy management progress and the performance of energy-consuming equipment among Group

companies. As part of these efforts, site employees known as energy-saving masters confirm energy-saving promotion frameworks, assess energy consumption, formulate policies and manage goals, and evaluate the performances of key equipment. They also create radar charts to clarify strengths and weaknesses and thereby encourage improvements.

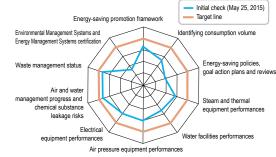


Asia-Pacific energy management conference in Jakarta, Indonesia

# CO<sub>2</sub> Emissions and Change from Base Year (Fiscal Year 2011)



#### Activities Radar Chart



## PRC

In 2015, the government of the PRC enacted the revised Environmental Protection Law and Air Pollution Law to strengthen oversight over air, water, soil and noise. The government also required plants above certain scales to disclose environmental information. It was against this backdrop that specialists from the Production Management Department visited four sites in the south of the country to inspect environmental management systems and to follow up on issues.

#### Americas and Europe

In October 2013, the Sun Chemical Group—which has operations in North, Central and South America and in Europe—rolled out a new internal Web-based data collecting system called EcoTrack, which facilitates the collection and centralized monitoring of data for key sustainability metrics related to energy, water, waste and safety at 153 sites. In addition to increasing the transparency of site data related to production, energy-saving initiatives and CO<sub>2</sub> emissions, among others, EcoTrack was designed to encourage the sharing of information and the horizontal deployment of measures, facilitating the calculation of optimum electric power and operating times for individual processes. In Europe, the Sun Chemical Group continued to actively promote the use of renewable energy. In fiscal year 2015, Sun Chemical Group facilities in Europe used 900,000 kWh of renewable energy, 78% of which was accounted for by wind power and 22% by solar power.

#### Reporting to the CDP

5

The CDP (formerly the Carbon Disclosure Project) is a global nonprofit organization (NPO) that works on behalf of institutional investors to motivate companies to disclose information on initiatives to combat climate change and key environmental data. The CDP analyzes and evaluates information reported by approximately 6,000 companies worldwide, including 500 in Japan, and communicates its findings to said institutional investors. DIC has been reporting to the CDP since 2010. The CDP has recognized the Company's consistent environmental initiatives and in fiscal year 2015 awarded it an overall score of 98A- (98 points for disclosure and a performance class of A-), significantly exceeding the average for companies based in Japan, which was 86C.

## **VOICE** from the DIC Group

#### We are promoting energy conservation with the aim of achieving a balance between corporate growth and sustainability.

The adoption of the Paris Agreement at COP21 in December 2012 was a historical milestone. Under the agreement, emerging economies are also required to implement measures to combat global warming. As a consequence, we have seen a tightening of regulations governing greenhouse gas emissions in many countries and regions. Our new medium-term management plan, DIC108, positions "low carbonization" as a crucial theme to respond to social imperatives going forward. We will continue to implement initiatives aimed at ensuring that employees of the global DIC Group recognize the importance of energy conservation to our ability to achieve a balance between corporate growth and sustainability and at motivating them to achieve the targets that have been set.



General Manager, Production Management Department Michio Uchiyama

Core and Category-Specific Themes

#### **Basic Approach**

As chemicals companies handle a considerably greater volume and more diverse range of chemical substances than companies in other industries, they must be extremely vigilant 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 under a voluntary scheme created by the Japan Chemical Industry Association (JCIA) since fiscal year 2005. In fiscal year 2013, DIC introduced MBO at DIC Group companies in Greater China and the Asia-Pacific region with the aim of further encouraging emissions reductions.

# Principal Initiatives in Fiscal Year 2015

In fiscal year 2015, DIC and DIC Group companies in Japan used and/or produced 106 and 115 targeted chemical substances\*, respectively, in amounts exceeding 1.0 metric tonne. Both DIC and DIC Group companies in Japan sought to meet their emissions reduction targets for PRTR-designated substances by reviewing cleaning processes for reaction tanks and local exhaust ventilation devices. However, solvent recovery equipment at three sites malfunctioned, resulting in a decrease in the equipment's hours of operation, as a consequence of which DIC reported a 10.0% increase and DIC Group companies reported an 8.0% increase in emissions of these substances.

Overseas, DIC Group companies tracked 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 Greater China and the Asia-Pacific region introduced MBO using pertinent national targets and guidelines, thereby reinforcing their commitment to such efforts. The Group will continue working to attain both facility- and operations-related reductions targets.

\* 462 class-1 chemical substances designated by the PRTR + 89 chemical substances (excluding class-1 substances) and one chemical substance group targeted for study by the JCIA (revised down from 105)

Number of Targeted Chemical Substances Used and/or Produced in Amounts Exceeding 1.0 Metric Tonne in Fiscal Year 2015



**Environmental Emissions of Targeted Chemical Substances** 

(Metric to 1,000

500

0 '00 (Base ver

Year 2015

(551 Substances, Including those Designated by the PRTR, and One Substance Group) in Fiscal Year 2015

· · · ·	<b>0 3</b> 7	17
	DIC	DIC Group (Japan)
Emissions into the air	208 metric tonnes	382 metric tonnes
Emissions into water	11 metric tonnes	12 metric tonnes
Emissions into soil	O metric tonnes	0 metric tonnes

10

Emissions of VOCs

into the Air in Fiscal

## Reducing Environmental Impact on Air, Water and Soil

#### Addressing VOC Regulations

In fiscal year 2015, emissions of VOCs into the air generated by DIC amounted to 208 metric tonnes, an increase of 10.0% from fiscal year 2014, while those by domestic Group companies totaled 382 metric tonnes, up 8.0%. The principal factor behind these increases is malfunctioning solvent recovery equipment at three sites, which resulted in a decrease in the equipment's hours of operation.

Overseas, Group companies in Greater China and the Asia-Pacific region are using MBO to promote ongoing emissions reductions. In the PRC, in particular, the Group is updating facilities and stepping up management practices in response to the tightening of regulations governing emissions of VOCs.

# Managing Water Resources

The DIC Group withdraws fresh water (tap water and industrial water) for use in production

processes and air conditioning and for drinking, among others. The Group also discharges wastewater-after purifying it in line with internal standards that exceed official standards in the countries and territories where it has operations-into rivers and other fresh water bodies. In fiscal year 2015, fresh water withdrawn by the global DIC Group amounted to 40,925,000 m<sup>3</sup>, 1.6 times the fiscal year 2014 level, comprising withdrawals by the DIC Group in Japan Fresh Water Withdrawn by the Global DIC Group in Fiscal Year 2015 40.925.000 m

times

the fiscal year 2014 level

Emissions of Targeted Chemical Substances into the Air

'12

'13

(551 Substances and One Substance Group)

'11

DIC

Wastewater Discharged by the Global DIC Group in Fiscal Year 2015 29,396,000 m

DIC Group (Japan)

DIC DIC Group (Japan)

15 (Fiscal year



of 30,063,000 m<sup>3</sup>, up 2.4 times, and by Group companies overseas of 10,862,000 m<sup>3</sup>, an increase of 5.0%. Wastewater discharged by the global DIC Group in fiscal year 2015 amounted to 29,396,000 m<sup>3</sup>, 2.1 times the fiscal year 2014 level. The principal reason behind the increase in fresh water withdrawn was the fact that domestic Group companies with abundant water rights (14,000,000 m<sup>3</sup>/year) were newly included in the scope of reporting.

#### Soil and Groundwater Pollution Studies 3

In addition to complying strictly with Japan's Water Pollution Control Act and Soil Contamination Countermeasures Act, the DIC Group in Japan implements soil and groundwater surveys and countermeasures as necessary and assesses related environmental and safety risks.

2

# Themes that Demonstrate Unique Capabilities

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—key causes of acid rain—from boilers. These efforts have yielded noteworthy results. The Group is also working to reduce chemical oxygen demand (COD), an indicator of water quality deterioration in wastewater, thereby enhancing its water quality management.

Overseas, Group companies are also switching fuel from light oil to natural gas and replacing light oil-fired and heavy oil-fired boilers with waste wood-fired biomass boilers at sites with appropriate infrastructure.

In the area of water quality management, the Group is also working to protect the environment, including promoting the reuse of water and installing closed-loop water recycling and wastewater treatment systems at its sites that purify water to a level that exceeds the legally mandated standard.

#### **5** Complying with Regulations Governing Emissions of Dioxins

In Japan, the DIC Group monitors emissions of dioxins from waste incinerators that produce these byproducts, a group of compounds with diverse possible isomers of varying toxicities. At present, the Group has six such 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.

# **Reducing Industrial Waste**

#### **Basic Approach**

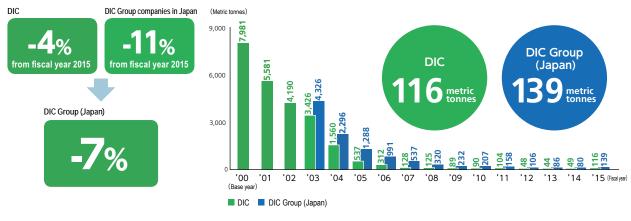
The DIC Group aims to minimize industrial waste by recycling and reusing materials. Since fiscal year 2001, DIC has been involved in a zero emissions initiative\* aimed at reducing industrial waste disposed of as landfill. DIC has deployed zero emissions initiatives at DIC Group companies in Japan since 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, and ensures that waste is properly treated by promoting strict compliance and on-site confirmation by designated departments at each of its production facilities.

\* Zero emissions initiatives: DIC is promoting initiatives aimed at reducing the volume of waste disposed of as landfill by 95% from the fiscal year 2000 level.

# Principal Initiatives in Fiscal Year 2015

#### Reducing Industrial Waste Disposed of as Landfill

The DIC Group works actively to reduce its disposal of industrial waste as landfill by recycling cinders, dust and sludge into, among others, roadbed materials and raw materials for cement, using thermal recycling to recover waste heat and reducing production losses by increasing yields. In fiscal year 2015, the total volume of industrial waste disposed of as landfill by the DIC Group in Japan was 139 metric tonnes, 1.7 times the fiscal year 2014 level (80.0 metric tonnes), with the principal contributing factor being the increase at the Kashima Plant resulting from an issue involving biomass boiler fuel. In fiscal year 2016, each DIC Group company in Japan will step up the implementation of measures aimed at reducing the total volume of industrial waste generated by its production facilities by 1% from the fiscal year 2015 level and/or reduce the volume of industrial waste they dispose of as landfill, while at the same time promoting zero emissions initiatives.



#### Industrial Waste Generated in Fiscal Year 2015 Industrial Waste Disposed of as Landfill

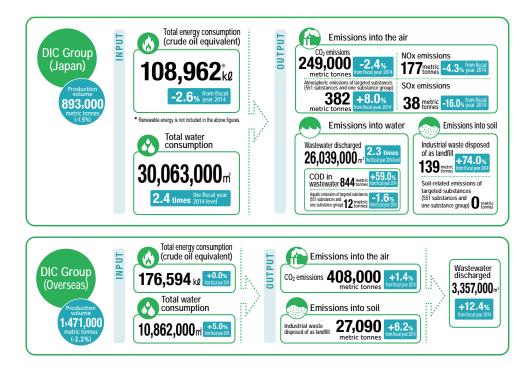
#### **Initiatives Overseas**

In addition to ensuring the disposal of industrial waste in a manner that complies with national and regional legal and regulatory requirements, the DIC Group's overseas production facilities work to minimize industrial waste through the voluntary recycling and reuse of materials.

In fiscal year 2015, DIC Group companies in the Americas and Europe, Greater China and the Asia–Pacific region deployed measures aimed at achieving reductions in industrial waste generated during various production processes that exceeded nationally and regionally mandated levels. Nonetheless, the total volume of industrial waste generated by DIC Group production facilities overseas rose 6.2%. Looking ahead, regional headquarters in these areas will focus on further reinforcing compliance with local laws and regulations while at the same time cooperating with DIC's Responsible Care and Production Management departments to analyze the reasons for this increase with the aim of limiting the generation of industrial waste and reducing the volume of industrial waste disposed of as landfill.

# Overview of Environmental Impact of the DIC Group's Operating Activities -

The DIC Group quantifies its environmental inputs (resources consumed), such as energy and water consumption, and outputs, that is, emissions into the environment, and uses its findings to formulate comprehensive and efficient strategies for reducing its environmental footprint.



# Managing Chemical Substances in Products

# Promoting Safety for Chemical Substances and Products

#### Basic Approach and Framework for Implementation

In accordance with the UN Economic Commission for Europe's Globally Harmonized System of Classification and Labelling of Chemicals (GHS), in 2009 DIC established CIRIUS (Chemical Substance Information Comprehensive Management System) for domestic products with the aim of responding swiftly to requests to reduce risks by providing customers with sufficient information on hazards associated with chemical substances. CIRIUS centralizes the management of information about raw materials and chemicals to facilitate the provision of reliable SDSs. The system also automatically checks various laws and regulations.

In 2013, DIC began using the Wercs (a global SDS and label creation system developed with know-how from DIC) for products for export. As a result, DIC now has a structure that enables it to compile SDSs for more than 250,000 products that comply with national and regional laws and regulations and is accessible in all necessary local languages. In April 2014, DIC began using the Wercs to issue SDSs and labels for all exported products.

As specialized expertise in chemical substance management is essential, DIC focuses on training in the manufacture, import and handling of chemicals in accordance with applicable laws and regulations and draws on its proprietary licensing system to enhance the skills of employees.

#### 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 that it can respond swiftly and effectively to revisions in laws.

In fiscal year 2015, steps were taken across Asia to reinforce the management of chemical substances. Of particular note, a new law came into force in the ROK, while Taiwan introduced a new system for registering chemicals and the PRC published the Catalog of Hazardous Chemicals (2015). In response, DIC worked steadily to strengthen communications with local Group companies and to analyze information and submit applications for registration of pertinent chemical substances.

In advance of the May 2018 deadline for registering existing chemical substances under the European Union's Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) regulation, DIC is registering existing exported low-volume chemical substances and collecting information on substances of very high concern (SVHCs), restricted substances and authorized substances.

\* Under REACH, businesses bear full responsibility for evaluating the safety of chemical substances they produce and/or use with no distinction made between "existing" and "new" substances. REACH also prohibits the use of specified chemical substances that pose unacceptable risks to human health.

#### Training in Chemical Substance Management

Compliance with laws and ordinances is a fundamental requirement for DIC as a comprehensive chemicals manufacturer and thus central to risk management. Accordingly, the Company endeavors to improve employees awareness and knowledge of chemical substance regulations in Japan and overseas by holding workshops and maintaining a proprietary internal licensing system.

Efforts include 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. and other pertinent legislation. DIC only licenses employees who have completed designated training and passed in-house examinations. The licenses are valid for either two or three years. 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 fiscal year 2015, 1,339 employees had qualified for a Class A license, which requires specialized knowledge. Another 213 people had passed the exam for a Class B license, which pertains to ancillary operations. In fiscal year 2015, DIC established a new advanced course, in which 71 individuals earned licenses.

# 🗐 Quality

# Enhancing Product Quality and Customer Satisfaction

**Basic Approach** 

Along with its Environment, Safety and Health Policy, the DIC Group views the improvement of product 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."

Related information

csr/quality

Enhance quality

Product divisions QMS

Production facilities certified under ISO 9001

**Production Administrative Division** 

and Technical Administrative Division

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

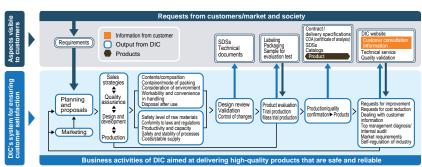
# Framework for Implementation

To better leverage its agility and comprehensive capabilities, DIC previously realigned its overall quality management system (QMS), establishing a matrix-like corporate organization that positions product divisions on the vertical axis and 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 benchmark 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.

In line with its belief that the improvement of product quality is essential to upholding a sound operating foundation, in fiscal year 2015 DIC established the Quality Assurance Department, as well as set up quality assurance sections within each product division, with the goal of further reinforcing QMS across the entire DIC Group. By thus dividing product-specific QMS and Groupwide QMS, the Group has succeeded in creating a QMS that is both prompt and meticulous.

# Initiatives Aimed at Increasing 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. After products are sold, customer and market assessments are gathered and fed back to development departments to facilitate further quality improvements.



#### New Efforts to Enhance Employee Education in the Area of Product Quality

Committed to providing safe products that customers feel secure using and are satisfied with, DIC recognizes the importance of ensuring that employees maintain a high awareness of quality, as well as a constant commitment to achieving further quality improvements and upholding high quality standards. In fiscal year 2015, the Company began providing education regarding product quality to all DIC Group employees. Beginning in fiscal year 2016, the Company also offers training led by external experts in the field for employees involved in quality management. Going forward, DIC will continue working to establish and promote awareness of product quality as essential to upholding a sound operating foundation.



Training session

# **VOICE** from the DIC Group

#### Our goal is to ensure the satisfaction of customers by providing safe products and services that they can use with confidence.

In fiscal year 2015, DIC established the Quality Assurance Department, a move designed to further strengthen the Group's QMS. We collaborate with the quality assurance sections of product divisions to ensure awareness of DIC's Quality Policy and implement a variety of related measures. Product divisions work to enhance quality at all stages of a product's life cycle, from planning, development and the selection of raw materials through to production, disposal and recycling. The Quality Assurance Department is responsible for fostering human resources conducive to achieving further quality improvements. Accordingly, we focus on planning and promoting educational programs that increase awareness of quality and improving quality management skills.

General Manager, Quality Assurance Department Yuuichi Kougo



**Basic Themes** 

Increase

custome satisfactio

# 🚨 Human Resources Management

# Working to Enhance Job Satisfaction

Related information we

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



#### Basic Approach to Human Resources Management

With the aim of being an organization that empowers all employees to reach their full potential, the DIC Group is committed to respecting human rights and eliminating all forms of discrimination and to creating a work environment that embraces diversity. The Group also strives to support a healthy work–life balance for each employee and create a work environment conducive to job satisfaction and to foster local human resources in markets around the world, which it recognizes as essential to ensuring sustainable corporate growth under its current medium-term management plan.

# **Respect for Human Rights**

The DIC Group supports and adheres to global codes governing human rights, notably the Universal Declaration of Human Rights. The DIC Group Code of Business Conduct, which outlines standards that 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 Group Code of Business Conduct and to conduct themselves as stipulated therein. In fiscal year 2015, a total of 57 domestic and overseas Group companies implemented voluntary human rights and labor practices inspections as part of ongoing efforts to prevent issues from arising. The results of these inspections were assessed and no violations were found to exist.

In fiscal year 2010, DIC became a signatory to the UNGC, pledging its support for the UNGC's 10 principles, which include tenets regarding human rights and labor. The Company continues to implement related initiatives in all areas of its corporate activities to reinforce respect for human rights in the human resources management practices of all Group companies and prevent violations from occurring.

# Building Trust with the DIC Employees' Union

DIC's management and representatives of its employees' union meet regularly with the goal of ensuring healthy industrial relations based on mutual trust. In addition, through labor-management councils and casual management conferences, DIC shares management information and its vision for the future with union representatives and encourages the frank exchange of opinions.

# **Global Human Resources Management**

The DIC Group has established a global human resources management framework capable of supporting efforts to foster local employees overseas, as well as to hire individuals based on business considerations without regard for nationality. Having created a human resources system and introduced specialized training for the next generation of executives at Group companies in the PRC, the Group has recently taken similar steps for companies in Southeast Asia. Other efforts include creating global human resources databases and establishing systematic training programs.

Separa (volu

		Fiscal year 2013	Fiscal year 2014	Fiscal year 2015
	Male	2,842	2,876	2,898
Number of employees	Female	642	666	683
	Total	3,484	3,542	3,581
Average age	Male	42.2	42.2	42.2
	Female	39.4	39.8	40.3
	Total	41.6	41.7	41.8
Average years of employment	Male	18.2	18.2	18.2
	Female	17.0	17.4	17.7
	Total	18.0	18.1	18.1
New graduates hired	Male	70	72	75
	Female	24	19	20
	Total	94	91	95

		Fiscal year 2013	Fiscal year 2014	Fiscal year 2015
		(Fiscal year 2010 hires)	(Fiscal year 2011 hires)	(Fiscal year 2012 hires)
ntion	Male	100%	<b>91.2</b> %	<b>95.7</b> %
after years)	Female	100%	100%	100%
ycars)	Total	100%	<b>92.6</b> %	96.5%
rations	Male	14	23	37
ntary) ber of	Female	10	7	8
duals)	Total	24	30	45
	Male	0.5%	0.8%	1.3%
tion rate ntary)	Female	1.6%	1.1%	1.2%
indi y	Total	0.7%	0.9%	1.3%

# **Promoting Diversity**

The DIC Group actively pursues diversity by employing a broad spectrum of individuals without regard to considerations such as gender, nationality, physical limitation or age. The Group works to foster a corporate culture that draws on its understanding and respect for diversity to produce creative ideas and to incorporate the concept of diversity into management, thereby creating workplaces that enhance job satisfaction.

#### Hiring Diverse Human Resources

With the objective of securing talented individuals with advanced specialized capabilities, global perspectives and language abilities, DIC actively promotes the hiring of international students completing undergraduate or graduate studies at Japanese universities; Japanese and foreign nationals completing undergraduate or graduate studies at overseas universities; and experienced mid-career candidates with extensive experience and expertise. At present, 31 foreign nationals work in various capacities at DIC. Fiscal year 2016 new hires included eight foreign nationals.

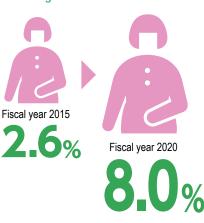


#### Expanding Career Opportunities for Women

In line with its commitment to promoting diversity, DIC implements a variety of initiatives to expand career opportunities for female employees. Since launching a full-scale program with this objective in 2007, the Company has pushed ahead with measures to transform the mindset of all employees and its corporate culture, provide education designed to encourage the drive and determination of female employees and broaden the range of jobs open to women. In fiscal year 2015, DIC established the C<sup>3</sup> Advisor System, whereby female employees with experience in handling the demands of career and childcare are appointed to advise their juniors who are currently taking childcare leave on ways to maintain an effective balance once they return to work.

With the goal of being an organization that empowers female employees, DIC will continue to implement initiatives focused on broadening the range of jobs open to women. Through such efforts, the Company aims to boost the percentage of management positions occupied by female employees to 8.0% by fiscal year 2020, from 2.6% in fiscal year 2015. DIC will also continue working to expand its recruitment of new female graduates from technical schools and bachelor's and master's degree programs, both sources of talented human resources. DIC has also formulated an action plan based on Japan's Act on Promotion of Women's Participation and Advancement in the Workplace.

Female Employees in Management Positions



Action plan (published in Japanese only): 🗰 http://www.dic-global.com/ja/csr/stakeholder/pdf/promote\_career\_opportunities\_for\_women.pdf

#### Reemployment after Retirement and Support for Retirement Planning

DIC has deployed a system that facilitates the reemployment until age 65 of individuals reaching the retirement age of 60 and wishing to remain with the organization. With available options including full-time work, short-time work and work sharing, this system enables reemployed individuals to maximize their experience and make full use of their accumulated technological capabilities and specialized expertise, thereby

contributing to sustainable growth for the DIC Group and the training of subsequent generations.

DIC also offers classes for employees within a year of retirement that helps them prepare for retirement. These classes provide assistance with retirement planning, education regarding the national pension system and retirement lifestyle simulations.

#### Number of Reemployed Individuals

	Fiscal year 2013	Fiscal year 2014	Fiscal year 2015
Number of retirees (A)	24	39	126
Individuals seeking reemployment	16	28	104
Number of individuals reemployed (B)	16	27	97
Reemployment rate (B) / (A)	<b>66.7</b> %	<b>69.2</b> %	<b>77.0</b> %

# **VOICE** from the DIC Group

#### I want to use my ability to understand local thinking to serve as a bridge between Japan and overseas markets.

When I joined DIC I had just graduated university in the PRC, spoke no Japanese and didn't really know anything about Japanese companies. I was nervous and uncertain in the beginning, but the workplace atmosphere was great and my superiors and colleagues were kind and patient in teaching me everything I needed to know, so I really enjoyed my job. I am always impressed by my Japanese colleagues' industrious nature and meticulous attention to detail in all aspects of their work, as well as by the corporate culture of Japanese companies, which emphasizes the diligent observation of rules and the creation and provision of safe, high-quality products. In the future, I want to use my ability to understand local thinking to serve as a bridge between Japan and overseas markets with the aim of reinforcing relations and contributing to the success of our LCs business in the PRC and Taiwan. Fine Synthesis Technical Group 6, Saitama Plant Wei Wu



Basic Themes

# Initiatives that Support a Healthy Work-Life Balance

#### Enhancing Programs that Help Employees Balance the Demands of Work and Home

In 1986, DIC blazed a trail for chemicals manufacturers in Japan by implementing a childcare leave program. Having established work and childcare balance support programs that exceed legal requirements in 2007, the Company continues to promote measures that make it easier for employees to make use thereof. DIC has also deployed systems that

enable employees to restrict the distance they can be transferred, reduce overtime hours, encourage the taking of annual paid leave and promote health management. Looking ahead, the Company will examine effective measures in response to amendments to the Act on the Welfare of Workers Who Take Care of Children or Other Family Members Including Child Care and Family Care Leave, planned for in 2017, to prevent employee turnover attributable to the need to care for children or elderly family members.

	1	1	
	Fiscal year 2013	Fiscal year 2014	Fiscal year 2015
Number of employees using the Childcare Leave Program	21	28	29
Number of employees using the Leave to Assist with Parenting Program	43	63	64

Number of Employees Using the Childcare Leave and Leave to Assist with Parenting Programs.

Note: Figures for fiscal year 2013 are for an irregular transitional nine-month period (April-December 2013).

# Securing and Fostering Human Resources

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

To ensure that the efforts and achievements of all employees 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 qualification is done through screening based on objective standards, thereby guaranteeing equal opportunities for promotion to all motivated, capable employees. Remuneration and personnel evaluation 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 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.

#### 2 Fostering Human Resources to Reinforce Front-Line Capabilities and Accelerate Change

Having recognized fortifying its Group organizational capabilities and enhancing the skills of its people as important challenges, DIC has declared the medium-term focus of its human resources development program as being to foster human resources capable of reinforcing front-line capabilities and accelerating change. DIC's training system comprises programs in six categories. These programs are based on curricula that emphasize a systematic approach to helping each employee acquire critical skills. Going forward, training emphasizes the concepts of "global" and "diversity," with training to improve English-language skills expanded and Japanese-language training for non-native speakers and entry-level education for mid-career hires added.

#### **DIC Training Programs**

Management- level training	Promote globalization, strengthen/foster the ability of management-level employees to deal with risks	DIC Management School, media training
Global human resources development	Systematic efforts to foster managers and employees of overseas Group companies, enhance the skills of Japanese employees assigned to overseas posts, improve the Japanese-language abilities of employees who are not native speakers	Global Management (preparatory training for employees assigned to overseas posts), Global Challenge Program, Target Global Program (training to enhance English-language communications skills), Effective E-Mailing (training in how to compose e-mails in English), Japanese- language training for employees who are not native speakers
Level-specific training	Education and training to equip employees with the skills to fulfill responsibilities at each level	Qualification-specific training (J, M, S, senior); training tailored to different management ranks
Department- and job-specific training	Education and training to enhance capabilities required by different departments and jobs	Human resources development programs tailored to production departments (Kaizen Skill Improvement Training Program, others), technical departments (training to support the ability to propose R&D themes, others), sales departments (training to cultivate proposal development capabilities, others) and support departments ("why-why analysis" training, others)
On-the-job training	Hands-on training in the workplace to foster employees and cultivate skills	Workplace-specific on-the-job training, domestic technical department trainee program, Overseas Trainee Program, Reverse Trainee Program
Self development	Support for employees seeking to enhance their skills	Correspondence courses, e-learning courses, in-house seminar courses, Skype-based English conversation courses, preparatory courses for the TOEIC Institutional Program (IP) Test

# **VOICE** from the DIC Group

#### There is more to English than speaking, listening comprehension and reading!

My job involves a fair amount of business travel overseas, so I took the Target Global Program, the goal of which is to enhance Englishlanguage communications skills. I think that people are inclined to think that English speaking, listening comprehension and reading abilities are all you need to do business overseas. This program, which focused on assertiveness, negotiating techniques and how to conduct meetings to motivate people to generate ideas and reach conclusions, taught me what is really important. Training sessions were conducted entirely in English, but the relevance of what I learned is certainly not limited to the English-speaking world. I am confident that these skills will stand me in good stead and I look forward to applying them in the field.



Functional Coatings Sales Department, Liquid Compounds Product Division Masayuki Aota

# Sustainable Procurement

# **Expanding Sustainable** Procurement Worldwide

Related information weight

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



#### **Basic Approach to Sustainable Procurement**

With the aim of ensuring its extended supply chain functions in a socially responsible manner, the DIC Group established the DIC Group Universal Purchasing Policy in 2008, based on which it also formulated purchasing management regulations, thereby creating a configuration for sustainable procurement. In 2009, the Group formulated the DIC Group CSR Procurement Guidelines, which clarify issues it expects suppliers to address. The Group promotes CSR procurement across its supply chain by ensuring that all suppliers understand guidelines and implement improvements and initiatives necessary to ensure the sustainability of Group procurement. The DIC Group has operations in Japan, the Americas and Europe, Greater China and the Asia-Pacific region. Group companies in different regions collaborate to share information and liaise with suppliers on a global basis to facilitate the preferential procurement of critical raw materials.

# Promoting CSR Procurement

#### The DIC Group CSR Procurement Guidelines

- Compliance with laws and social norms
- 2 Respect for human rights and
- consideration for work environments
- Safety and hygiene
- 4 Promotion of sound business management
- G Consideration for the environment
- 6 Information security
- Appropriate quality and safety and improved technologies
- 8 Flexible attitude to ensure stable supplies and respond to change
- Ontribution to local communities and society Promoting CSR and deploying
- it in the supply chain

In July 2013, the DIC Group published version 2 of its DIC Group Supply-chain CSR Deployment Guidebook. The Group uses this document to promote awareness of its CSR procurement guidelines among suppliers and uses it as a tool to encourage efforts to advance CSR procurement. Version 2 of the guidebook-which further segments the DIC Group's 10 CSR procurement guidelines into 46 issues, providing explanations of each, as well as a self-evaluation questionnaire and a five-level marking sheet-has been distributed to suppliers worldwide. From November 2013 through December 2015, the DIC Group conducted assessments for 566 suppliers, providing feedback to all assessed companies.

Following the self-evaluation stage, the DIC Group conducts on-site inquiries for certain suppliers. In addition to enabling the Group to request necessary improvements, such inquiries are useful in enhancing mutual understanding and encouraging responsible procurement practices. Between fiscal years 2011 and 2015, the DIC Group conducted on-site inquiries for 45 suppliers.



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Feedback sheet

# **Global Procurement Initiatives**

In fiscal year 2015, DIC and regional headquarters in the PRC and the Asia-Pacific region collaborated to promote cooperation in both overall sustainability and CSR procurement at principal Group companies in the two regions. Subsequently, the Group conducted assessments of 70 suppliers in Greater China (including Taiwan). As of December 31, 2015, 51 of these companies had submitted completed questionnaires and received feedback. DIC also collaborated with the Sun Chemical Group, which functions as the DIC Group's regional headquarters for the Americas and Europe, to promote awareness of CSR procurement by conducting assessments of 160 key suppliers in these two regions.



Presentation for purchasing officers in the Asia-Pacific region

# **VOICE** from the DIC Group

#### We are promoting CSR procurement by conducting on-site inquiries for major suppliers.

I currently work in the Purchasing Department in the area of raw materials procurement. With the aim of realizing sustainable procurement, we periodically conduct onsite inquiries for suppliers of principal raw materials. Actually going to the supplier gives one a much clearer idea of the supplier's initiatives than can be gained simply by reading questionnaire responses. One company I visited was taking steps to illuminate legal and regulatory risks and had established study groups to explore issues related to compliance and the Act against Delay in Payment of Subcontract Proceeds, Etc. to Subcontractors, allowing me to see firsthand the importance the company placed on compliance initiatives. I also inspected the company's production facilities, giving me the opportunity to observe its stringent process control systems and BCP measures, including dividing production among multiple facilities. This process enabled us to deepen our relationship with this particular supplier.



Assistant Manager, Purchasing Department Miho Hayashi

# Establishing Solutions-Oriented Businesses

Related information

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



# Capitalizing on the Changing Needs of Society

The DIC way of doing business starts with listening to what its customers say. DIC's approach is to swiftly grasp the concerns of its customers to gain insights into emerging social needs and offer appropriate solutions. While the starting point is the voice of its customers—an approach known as "customer-in"—the Group also takes a "market-in" approach, paying heed to issues of global significance, such as global warming, with the aim of predicting trends and anticipating the future needs of society.

# **Enhancing Brand Strength**

Established as a printing inks manufacturer, DIC has expanded its business by leveraging its capabilities in organic pigments, synthetic resins and fine chemicals, capitalizing on its wealth of elemental technologies to develop a diverse portfolio of innovative products. To encourage broader customer awareness of its distinctive products and technologies, DIC publishes and distributes market-oriented product guidebooks. DIC also strives to enhance its brand strength through participation in trade shows both in Japan and overseas, which in fiscal year 2015 included FINETECH JAPAN, Tokyo Pack and Touch Taiwan 2015. The Group also organizes private exhibitions for customers on an individual basis.

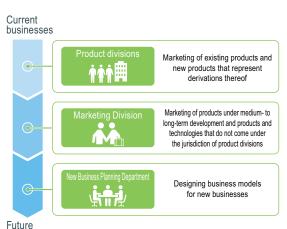
# Identifying and Fostering Promising Markets Based on Projections Needs and Future Trends

With the aim of realizing sustainable growth over the medium to long term, DIC has identified promising new markets arising from social imperatives in six key areas—resources, materials and energy; logistics and industrial equipment; electronic and electrical equipment; pharmaceuticals and medical devices; general consumer products; and construction infrastructure—and is striving to evaluate the possibility of cultivating demand in each. The Group is also working to identify key technologies, as well as to discern technological issues that must be addressed, allowing it to accurately gauge growth and technology development potential and determine which of these markets offer promise and which it will enter.

# Leveraging a New Corporate Organization

With the objective of enhancing customer convenience and emphasizing its comprehensive product and technological capabilities, in fiscal year 2016 DIC adopted a new corporate organization that incorporates the best features of its previous matrix-like organization while clarifying the responsibilities of individual departments and enhancing speed, thus helping to maximize synergies among Group companies, as well as to reinforce collaboration.

As part of this reorganization, DIC established a Marketing Division and a New Business Planning Department. The Marketing Division oversees two activities: market-focused cross-portfolio strategies and marketing of products requiring a medium- to long-term commitment before they contribute to business growth, as well as marketing of products and technologies that do not come under the jurisdiction of existing product divisions. The New Business Planning Department is charged with designing new business models for new businesses.

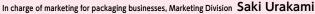


businesses

# **VOICE** from the DIC Group

#### Our goal is to promote multifaceted marketing with an emphasis on enhancing our value chain.

In fiscal year 2016, the Corporate Marketing Department and the three marketing departments attached to the sales administrative divisions were combined to create the new Marketing Division. Our focus is on three areas, which we have dubbed "industrial materials," "life and infrastructure" and "packaging businesses." Our core activities emphasize two perspectives, namely, DIC Group products and customers/regions. With the goal of helping expand the Group's operating foundation and contributing to consolidated net sales, we promote multifaceted marketing with an emphasis on enhancing our value chain through efforts to respond to short- to medium-term shifts in needs of customers and markets and medium- and long-term changes in social structure. I am in charge of marketing in the area of packaging businesses, which involves promoting the expansion of sales of oxygen- and vapor-barrier adhesives, laminating adhesive and other high-performance materials in global markets. My team also works to cultivate new markets and accelerate R&D in line with next-generation themes by collaborating with the Sun Chemical Group to reinforce global marketing. In particular, we are stepping up efforts to promote the cultivation of new markets by offering materials with barrier properties, migration solutions and other products that respond to concerns relating to, for example, safety and security, as well as the environment. These efforts give us a broad overview of our value chain, positioning us to develop competitive solutions.





# Proposing Solutions that Leverage Elemental Technologies

Related information

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



# Core and Category-Specific Themes

Achieving Sustainable Growth

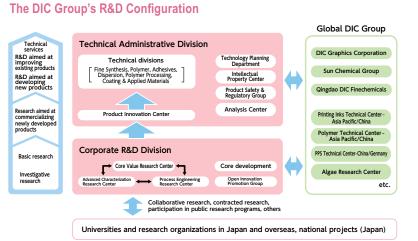
With the aim of achieving its Color & Comfort by Chemistry management vision, the DIC Group is leveraging its core technologies, including those in the areas of optics and color, organic molecular design and polymer design, as well as its elemental technologies in such areas as synthesis, compounding 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.

# Specific Initiatives and Achievements

The DIC Group is encouraging a shift toward materials with a reduced environmental impact—notably water-based and solventfree materials—and is advancing the development of environment-friendly products for use in displays and packaging, as well as for infrastructure-related applications, that help improve the environmental performance of the finished products in which they are used.

# A Global Framework for Product Development

To maximize global R&D resources, DIC's Technical Administrative Division and Corporate R&D Division cooperate with the R&D components of DIC Group companies around the world, including DIC Graphics Corporation; the Sun Chemical Group's research centers in the United States, the United Kingdom and Germany; and the Qingdao DIC Finechemicals Co., Ltd. in the PRC. In fiscal year 2014, the Group established two printing inks technical centers, one in Thailand for the Asia–Pacific region and one in the PRC, as well as a PPS technical service center in the PRC and Germany. In the United States, a new algae research center was opened that will capitalize on the Group's accumulated expertise in the cultivation and use of Spirulina to conduct comprehensive algae-related research in areas ranging from cultivation to practical application.



# **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 2015, environment-friendly products accounted for 53% of all products put out by DIC and subsidiary DIC Graphics.

# **VOICE** from the DIC Group

# We are developing environment-friendly packaging materials.

The *PASLIM* series is a selection of adhesives with oxygen-barrier properties that reduce the amount of packaging material waste. In recent years, we have seen an increase in the use of packaging materials comprising multiple layers of packaging film laminated together to package food products with the aim of prolonging shelf life. *PASLIM* was developed as an adhesive that would prevent oxygen permeation. The use of *PASLIM* eliminates the need to use multiple layers, facilitating the production of laminated packaging films that are dramatically thinner and lighter than conventional films but boast excellent oxygen-barrier properties. As well as preventing food deterioration, thinner, lighter films reduce the amount of packaging film used and lower CO<sub>2</sub> emissions attributable to such films. We will continue working to develop environment-friendly packaging materials with the aim of contributing to the realization of a sustainable society.



Head Researcher, Adhesives Technical Group 1, Adhesives Technical Division Masamitsu Arai

# Adding Color and Comfort to Lifestyles

Related information we

http://www.dic-global.com/en,



#### Basic Approach to Social Contribution

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

# **Examples of Recent Initiatives**

#### Visiting Science Lab Program

In line with the Japanese government's efforts to promote career education initiatives, as well as to help curb a decline in the popularity of science among children, DIC and DIC Graphics conduct visiting science labs at public elementary schools. Through this program, which focuses on, among others, experiments in pigment synthesis and offset printing, the Group seeks to spark children's interest in science and encourage them to realize the close relationship between science and their everyday lives.

In fiscal year 2015, the DIC Group's visiting science lab program was nominated and won silver in the category of initiatives chosen by elementary school students in the 2015 Education Support Grand Prix (formerly the CSR Initiative Award in Education), sponsored by Tokyo-based Leave a Nest Co., Ltd. At the request of Tokyo University of the Arts and Aichi University of the Arts, the Group also held labs for undergraduate and graduate students at both universities.



Visiting science lab at Tokyo University of the Arts



DIC's 2015 Education Support Grand Prix certificate

#### Comment

#### Collaboration between industry and academia is crucial to fostering human resources and advancing technology.

When I heard that DIC conducted visiting science labs at elementary schools on themes related to pigments, I asked the Company whether they would consider modifying lab content to make it suitable for students studying fine arts and conducting visiting labs at Tokyo University of the Arts and Aichi University of the Arts. A knowledge of materials is important to the future of these students, so the purpose of the lab was to promote understanding of the fact that most of the pigments used in modern-day paints are created using the power of science. For students, a visiting science lab conducted by people from a major corporation is a valuable opportunity to obtain a variety of information from a different perspective than that of their usual classes. I am a firm believer that collaboration between industry and academia is crucial to fostering human resources and advancing technology.



Associate Professor, Tokyo University of the Arts Takayuki Akimoto

#### Initiatives Led by the Central Research Laboratories

The Central Research Laboratories offers a variety of programs in such uniquely DIC topics as synthesis and chromatics to the students of local schools. In September and December 2015, respectively, students from Chiba Prefectural Sakura High School and Seishin Gakuen High School in Ibaraki Prefecture, both of which have earned the designation Super Science High School\*, were invited to the Central Research Laboratories to participate in a lab lesson on the theme of "synthesis and craftsmanship." Led by researchers from the facility, the event-which took place in a research laboratory-included an introduction to research conducted using state-of-the-art analytical equipment, a hands-on lesson on the use of said analytical equipment, a lab in which students experimented with synthesizing organic pigments and a lecture on DIC products, and was designed to help students better understand the concept of craftsmanship as it pertains to science. Lecturers also incorporated a career education component into the event, taking time to talk to interested students about the challenges and rewards of being a researcher.

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.



Lab lesson for Chiba Prefectural Sakura High School students at the Central Research Laboratories

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 2016, the museum celebrated its 27th 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. Two exhibitions are scheduled for 2016: photographs taken by Cy Twombly, one of the most acclaimed artists of the 20th century, and works by celebrated painter and printmaker Léonard Foujita.

In addition to its standing exhibit from its permanent collection of more than 1,000 major works, the museum stages special exhibitions several times a year that focus on pertinent literary works and other artifacts that evoke the cultural atmosphere at the time works were created to help visitors better understand the collection. Another appealing aspect of the Kawamura Memorial DIC Museum of Art is its location on a lushly forested 10-hectare site alive with seasonal flowers and foliage that has been open to the public since the museum's establishment. In cooperation with the Chiba Biodiversity Center, the museum has also established a biodiversity satellite, a special display area featuring display panels explaining the importance of biodiversity, in one of the site's rest cabins.

In a move aimed at promoting relations with the local community and fostering local cultural activities, the museum has established an annex gallery on the museum site. This facility, which serves as an exhibition space for local amateur artists, is also made available once a year to elementary and junior and senior high schools in the Sakura area for an exhibition of local students' works. The Kawamura Memorial DIC Museum of Art also accepts local junior high school students for work experience programs and welcomes elementary and junior high school art classes, led by teachers, for museum tours, with the goal of further supporting art education.



Kawamura Memorial DIC Museum of Art

#### Matching Gift Program

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 2015 drive and matching gift program were donated to 20 children's homes and facilities providing support for disabled individuals.



DIC employees visit child welfare facility Ryuyouen in Komaki, Aichi Prefecture, to present a donation

#### Support for Reconstruction Following the Great Fast Japan Fart

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 by the *Keizai Doyukai* (Japan Association of Corporate Executives) with the aim of assisting local residents in rebuilding their lives. This initiative, which is scheduled to continue for five years, seeks to support efforts to rebuild communities and stimulate local economies by delivering funds collected from corporate and individual donors directly to schools and other facilities in need

of support.

Nature trail traversing the museum site

DIC has also donated funds via the Japanese Red Cross Society to assist with recovery efforts in the wake of the 2016 Kumamoto Earthquake.



IPPO IPPO NIPPON project logo

# **Communication with Stakeholders**

# **Promoting Disclosure and** Communication

Related information we



# Core and Category-Specific Themes

#### Basic Approach to Promoting Communication

The DIC Group places a priority on communication with its stakeholders worldwide through direct dialogue in the form of, among others, participation in exhibitions, websites and events. By communicating effectively with stakeholders, the Group strives to ensure an adequate understanding of stakeholder expectations and to reflect such expectations 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	Ties with shareholders and investors	Ties with society	Ties with employees	Ties with the media
Basic approach	Build trusting relationships. By incorporating the demands of customers, seek to develop products that enhance customer satisfaction.	Ensure appropriate disclosure and build trusting relationships with shareholders and investors, encouraging both to evaluate DIC as an attractive investment.	Operate in harmony with the community and build positive relationships with local residents that will underpin the long-term sustainability of operations.	Provide workplaces that are conducive to job satisfaction and enable all employees to fulfill their potential. Over the long term, achieve true diversity.	Deepen mutual understanding through effective publicity, advertising and other communications efforts.
Communications tools	Websites     Product pamphlets     Corporate profile     DVDs     DIC Report	Websites     Press conferences     Annual report     Quarterly results     announcements     Vuka Shoken Hokokusho     (finadai disolare document required     of listed companies in Japan)     Shareholder newsletters     Corporate profile DVDs     DIC Report	Websites     Site reports     Corporate profile DVDs     DIC Report	<ul> <li>DIC Plaza (in-house newsletter)</li> <li>Intranet</li> <li>DIC Pockel Book (in-house Group data file)</li> <li>DIC Report</li> </ul>	<ul> <li>Press conferences</li> <li>Interviews with journalists</li> <li>DIC Report</li> </ul>
Opportunities for communication	<ul> <li>Sales activities</li> <li>Participation in exhibitions</li> </ul>	General shareholders' meetings     Results presentations     IR conferences     IR meetings     DIC IR Day	<ul> <li>Production facility tours</li> <li>Participation in projects involving collaboration among industrial concerns, government bodies and academic institutions</li> <li>Participation in community events</li> <li>Environmental monitoring</li> </ul>	Labor-management councils     Results presentations     for employees     Presentations on the DIC     Group Code of     Business Conduct     Sustainability presentations	Newspapers     Economic publications     Industry publications



DIC Graphics' 2015 private show (corporate headquarters)

Presentation on sustainability initiatives for guests (Tokyo Plant)





Results presentation (February 2015)



(Nuremberg, Germany)



DIC IR Day (September 2015)



Japan Calendar Competition



Results presentation for employees (February 2015)



Sunflower seed planting and art appreciation event (Kawamura Memorial DIC Museum of Art)



Interviews with

journalists in fiscal year 2015

89

Field of Education

SAKURAart exhibit at the Kawamura Memorial

DIC Museum of Art

Press conferences in fiscal year 2015

59

DIC Plaza

47\_ DIC Report 2016

# **Third-Party Verification**



The DIC Group commissioned SGS Japan Inc. to conduct third-party verification of its data for greenhouse gas emissions, discharge of industrial waste and number of occupational accidents (including number of accidents leading to workdays lost).

# **DIC Group Milestones**

### 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.



Dragon product trademark



DIC's founder, Kijuro Kawamura

# 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.

# 1952

#### Makes full-scale entry into the synthetic resins business

Establishes Japan Reichhold Chemicals Inc., then the second-largest joint venture with an overseas firm in the

history of the Japanese chemicals industry, and makes a full-scale entry into the synthetic resins business.



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 the** 

DIC Color Guide® Launches the DIC Color Guide®, which becomes the de facto standard for color selection in numerous industries, bolstering recognition of the DIC name.



Promotes expansion of printing inks business

Diversifies operations by building on base in printing inks, organic pigments and synthetic resins Actively introduces technologies from overseas and promote further diversification

# **Sustainability Initiatives**

#### 1973 **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.

# 1990

**Opens Kawamura** Memorial Museum of Art

Located in Sakura, Chiba Prefecture, 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.



#### 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 lower energy consumption.



#### 2006

Becomes signatory to the Responsible Care Global Charter Signs the CEO's 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 manufacturers.



# 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

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

#### 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.



# 1999

# Acquires Coates, the printing inks division of France's TOTALFINA

Establishes presence in India, Central and South America and elsewhere by acquiring the Coates Group from TOTALFINA S.A., France's largest oil company.

# 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 a leading name in the graphic arts materials business.



Sun Chemical's headquarters

# **2008** Changes Company name to DIC Corporation

Marks centennial anniversary by changing Company name to DIC Corporation and adopting a new corporate symbol.



Takes steps to advance environmental protection and expands global presence

DIC's new corporate symbol

# 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.

#### 2015 Completes reconstruction of corporate headquarters in Nihonbashi

In May 2015, completes the reconstruction of its corporate headquarters—the DIC Building—in Nihonbashi, Tokyo, the role of which was expanded to include oversight of the global DIC Group.



DIC Building

# 2016

Launches DIC108 medium-term management plan

Sets forth a growth scenario aimed at realizing sustainable growth and outlines what DIC must do between now and fiscal year 2018.

Seeks to advance globalization of core businesses and diversify into new areas

#### 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."



#### 2015

Selected for inclusion in the Dow Jones Sustainability Indices Asia Pacific Index Included for the first time in the DJSI

Prepares for a new phase

of growth

Asia Pacific Index, a global family of indices for socially responsible investing and a benchmark of global sustainability.

MEMBER OF Dow Jones Sustainability Indices In Collaboration with RobecoSAM (

#### 2007 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.

# **CORPORATE DATA**

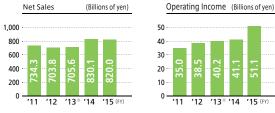
#### **Corporate Data**

Registered name:	DIC Corporation
Registered address:	35-58, Sakashita 3-chome, Itabashi-ku, Tokyo 174-8520, Japan
Corporate headquarters:	DIC Building, 7-20, Nihonbashi 3-chome, Chuo-ku, Tokyo 103-8233, Japan Tel: +81-3-6733-3000
Date of foundation:	February 15, 1908
Date of incorporation:	March 15, 1937
Paid-in capital:	¥96.6 billion
Number of employees:	20,264 (Nonconsolidated: 3,581)
Domestic facilities:	Two branch offices and nine plants
Number of subsidiaries and affiliates:	174 (Domestic: 31, Overseas: 143)

#### **Consolidated Financial Highlights**

	Fiscal year 2014 (Year ended December 31, 2014)	Fiscal year 2015 (Year ended December 31, 2015)
Net sales	¥830,078	¥819,999
Operating income	41,076	51,068
Ordinary income	39,925	48,995
Net income	25,194	37,394
Earnings per share (yen)	26.78	38.94
Total assets	803,703	778,857

Millions of yen, except for per share information



Note: 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.

(Information is as of December 31, 2015.)

#### **Board of Directors**

Representative Director	Yoshiyuki Nakanishi
Representative Director	Masayuki Saito
Director	Yoshihisa Kawamura
Director	Hitoshi Wakabayashi
Director	Kaoru Ino
Director	Takao Suzuki*
Director	Yukako Uchinaga*
	*0

#### Corporate Auditors

Corporate Auditor Corporate Auditor Corporate Auditor Corporate Auditor

Jiro Mizutani Yoshiyuki Mase Katsunori Takechi\* Cindy Yoshiko Shirata\* \* Outside

\* Outside

#### **Executive Officers**

President and CEO Executive Vice President Managing Executive Officer Executive Officer

Masavuki Saito Yoshiaki Masuda Toshio Hasumi Hitoshi Wakabavashi Kazunari Sakai Hideo Ishii Masami Hatao Kaoru Ino Toshifumi Tamaki Naoyoshi Furuta

Yoshiyuki Nakanishi

Executive Officer	Rudi Lenz
Executive Officer	Hideki Inouchi
Executive Officer	Masaya Nakafuji
Executive Officer	Koji Tanigami
Executive Officer	Shinsuke Toshima
Executive Officer	Sakae Yoshida
Executive Officer	Taihei Mukose
Executive Officer	Kiyotaka Kawashima
Executive Officer	Masanobu Mizukoshi
Executive Officer	Hiroyuki Ninomiya
Executive Officer	Kazuo Hatakenaka

(Information is as of March 29, 2016.)

#### Headquarters/Branches in Japan

#### **Corporate Headquarters**

#### Headquarters

DIC Building, 7-20, Nihonbashi 3-chome, Chuo-ku, Tokyo 103-8233, Japan Tel: +81-3-6733-3000

#### **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

#### **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

#### 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

#### 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**

Cast Film Japan Co., Ltd. DC Katsuya Co., Ltd. DIC Covestro Polymer Ltd. DIC Color Coatings, Inc. DIC Color Design, Inc. DIC Decor, Inc. DIC Decor, Inc. DIC EP Corp. DIC Estate Co., Ltd. DIC Graphics Corporation DIC Interior Co., Ltd. DIC Investments Japan, LLC. DIC Kako, Inc. DIC Kitanihon Polymer Co., Ltd. DIC Kyushu Polymer Co., Ltd. DIC Lifetec Co, Ltd. DIC Material Inc. DIC Material Inc. DIC Plastics, Inc. Hamamatsu DIC Co., Ltd. Japan Formalin Company, Inc. KJ Chemicals Corporation Mizushima Kasozai Co., Ltd.

#### **Principal Overseas Subsidiaries and Affiliates**

#### Asia and Oceania (Excluding Japan)

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 Fine Chemicals Private Limited DIC Graphics (Guangzhou) Ltd. DIC Graphics (Hong Kong) Ltd. DIC Graphics (Thailand) Co., Ltd. DIC Graphics Chia Lung Corp. DIC (Guangzhou) Co., Ltd. DIC India Ltd. DIC Korea Corp. DIC Korea Liquid Crystal Co., Ltd. DIC Lanka (Private) Ltd. DIC (Malaysia) Sdn. Bhd. DIC New Zealand Ltd. DIC Pakistan I td 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. Guangzhou Lidye Resin Co., Ltd. Hainan DIC Microalgae Co., Ltd. Kangnam Chemical Co., Ltd. Lianyungang DIC Color Co., Ltd. Lidye Chemical Co., Ltd. Nantong DIC Color Co., Ltd. Nantong Shan Kai Ming Ke Trading 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. Seiko PMC (Shanghai) Commerce & Trading Corp. Seiko PMC (Zhangjiagang) Corporation Shanghai DIC Ink Co., Ltd. Shanghai DIC Pressure-Sensitive Adhesive Materials Co., Ltd. Shenzhen-DIC Co., Ltd. Siam Chemical Industry Co., Ltd.

Sun Chemical (Hai' an) Limited Sun Chemical Holding (Hong Kong) Ltd. Sun Chemical Trading (Shanghai) Co., Ltd. Suqian Lintong New Materials Co., Ltd. Suzhou Lintong Chemical Science Corp. TOA-DIC Zhangjiagang Chemical Co., Ltd. Zhongshan DIC Colour Co., Ltd.

#### Europe and Africa

Benda-Lutz Skawina Sp. z.o.o. Benda-Lutz Volzhsky ooo Benda-Lutz Werke GmbH Coates Brothers (East Africa) Ltd. Coates Brothers (West Africa) Ltd. Coates Screen Inks GmbH DIC Europe GmbH DIC Holdings Austria GmbH DIC Holdings B.V. **DIC Performance Resins GmbH** ECG Holdings Ltd. Gibbon FineCal Ltd. **Glenside Properties Limited** Hartman D.O.O. Hartmann Druckfarben GmbH Hartmann-Sun Chemical EOOD Kingfisher Colours Ltd. Lorilleux Maroc S.A. Parker Williams Design Ltd. Sun Branding Solutions Ltd. Sun Chemical AB Sun Chemical AG Sun Chemical AG (S.A., Ltd.) Sun Chemical A/S Sun Chemical A/S Sun Chemical B.V. Sun Chemical d.o.o. Sun Chemical for Graphic Arts S.A.E. Sun Chemical GmbH Sun Chemical Group Coöperatief U.A. Sun Chemical Group S.p.A. Sun Chemical Holding B.V. Sun Chemical Inks Ltd. Sun Chemical Inks A/S Sun Chemical Lasfelde GmbH Sun Chemical Ltd. Sun Chemical N.V./S.A. Sun Chemical Nyomdafestek Kereskedelmi es Gyarto KFT (Sun Chemical KFT) Sun Chemical Osterode Druckfarben GmbH Sun Chemical Oy Sun Chemical Pigments S.L.

Nippon Epoxy Resin Manufacturing Co., Ltd. Oxirane Chemical Corp. Renaissance, Inc. Seiko PMC Corporation SUNDIC Inc. Techno Science, Inc. Topic Co., Ltd. YD Plastics Co., Ltd.

(Information is as of March 31, 2016.)

Sun Chemical Portugal-Tintas Graficas Unipessoal Ltda. Sun Chemical Printing Ink d.o.o. Sun Chemical Publication A.E. Sun Chemical Publication Romania S.R.L. Sun Chemical Publications Bulgaria EAD Sun Chemical S.A. Sun Chemical S.A.S. Sun Chemical (South Africa) (Pty) Ltd. Sun Chemical s.r.l. Sun Chemical, s.r.o. Sun Chemical, s r o Sun Chemical Sp. z.o.o. Sun Chemical Turkey Sun Chemical Ukraine Ltd. Sun Chemical ZAO Sun Inkjet Ceramics, S.L.

#### North, Central and South America

Benda-Lutz Corporation Camus Water Technologies LLC Coates Brothers (Caribbean) Ltd. DIC Imaging Products USA, LLC DIC International (USA), LLC Earthrise Holdings Inc. Earthrise Nutritionals, LLC. Inmobiliaria Sunchem, S.A. de C.V. Mondis Manufacturers Insurance Company N.V. New England Manufacturers Insurance Corp. Rycoline Products, LLC SC Funding LLC SC (Puerto Rico) Ink Sinclair International Inc. Sinclair S.A.S. Sinclair Sun Chemical Ecuador S.A. Sun Chemical (Chile) S.A. Sun Chemical Corporation Sun Chemical de Centro America, S.A. de C.V. Sun Chemical de Panama, S.A. Sun Chemical do Brasil Ltda. Sun Chemical Inks S.A. Sun Chemical Ltd. Sun Chemical Management, L.L.C. Sun Chemical of Michigan LLC Sun Chemical Peru S.A. Sun Chemical S.A. de C.V. Sun Chemical Venezuela C.A. Tintas S.A.S. Wiseman International Co., Ltd.

(Information is as of March 31, 2016.)

(Contact)

# **DIC** Corporation

Corporate Communications Dept.

DIC Building, 7-20, Nihonbashi 3-chome, Chuo-ku, Tokyo 103-8233, Japan TEL: +81-3-6733-3034 FAX: +81-3-6733-3038

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



# MEMBER OF **Dow Jones Sustainability Indices**

In Collaboration with RobecoSAM 🍋







