

# DIC108

## 2016-2018 Medium-Term Management Plan

February 12, 2016

Color & Comfort

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Representative Director, President and CEO

**DIC Corporation**

## A message from the management of DIC

Our new medium-term management plan, DIC108, sets forth a clear vision for the DIC Group's future and outlines the course of action it intends to take.

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.

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. This self-examination led us to articulate three key *corporate values*:

"Making it Colorful"

"Innovation through Compounding"

"Specialty Solutions"

In DIC108, we have created a medium- to long-term road map based on these three *corporate values* and organized what we need to do between now and 2018 into three sections focusing on, respectively, four business initiatives, cash flow management and the establishment of a solid management infrastructure.

With the aim of achieving sustainable growth, we pledge to work as one, guided by our new slogan, "Color & Comfort," to drive DIC forward.

Expect great things from us in the years ahead!

## "Color & Comfort"

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## Disclaimer Regarding Forward-Looking Statements

Statements herein, other than those of historical fact, are forward-looking statements that reflect management's projections based on information available as of the publication date. These forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from such statements. These risks and uncertainties include, but are not limited to, economic conditions in Japan and outside Japan, market trends, raw materials prices, interest rate trends, currency exchange rates, conflicts, litigations, disasters and accidents as well as the possibility the Company will incur special losses related to the restructuring of its operations.

# Operating Results Trends and Summary of Achievements under DIC105 (1)

## Operating results trends

(Billions of yen)

	2013 Actual (Adjusted)	2014 Actual	2015 Actual
Net sales	784.0	830.1	820.0
Operating income	44.1	41.1	51.1
Operating margin	5.6%	4.9%	6.2%
Net income	28.8	25.2	37.4
Interest-bearing debt	299.1	274.2	259.5
Total net assets	218.9	276.7	289.9
D/C ratio	57.7%	49.8%	47.2%

Note: Figures for 2013 have been adjusted to eliminate the impact of a change in accounting period

## Summary of key achievements

### Achievements

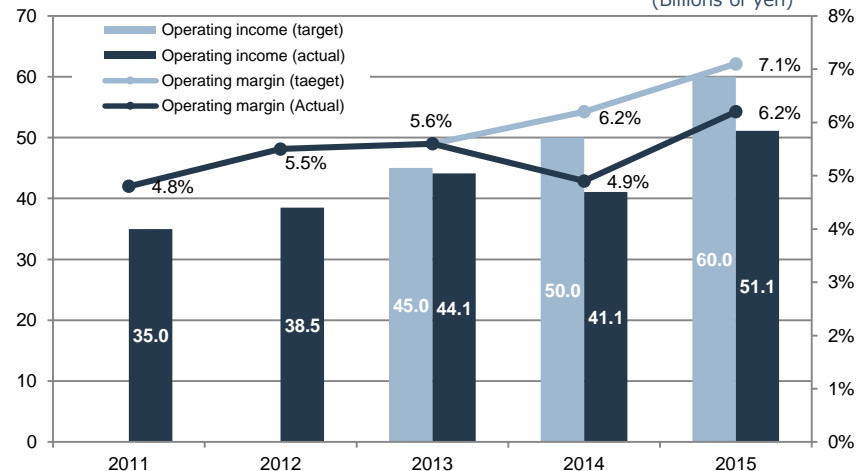
- Increased operating margin in printing inks business in North America and Europe (2012: 1.8% → 2015: 5.0%)
- Expanded the operating foundations of growth-driving businesses
- Revamped business portfolio based on business domains
- Steadily improved financial balance (Debt-to-capital (D/C) ratio: 2012: 66% → 2015: 47%)

### Ongoing Challenges

- Operating income shortfall (Target for 2015: ¥60 billion → Actual: ¥51.1 billion)
- Restructure business framework in mature markets, including Japan
- Increase income in businesses that will drive growth
- Create and cultivate next-generation businesses
- Accelerate investment in growth (Target for three-year period: ¥120 billion → Actual: ¥97.9 billion)

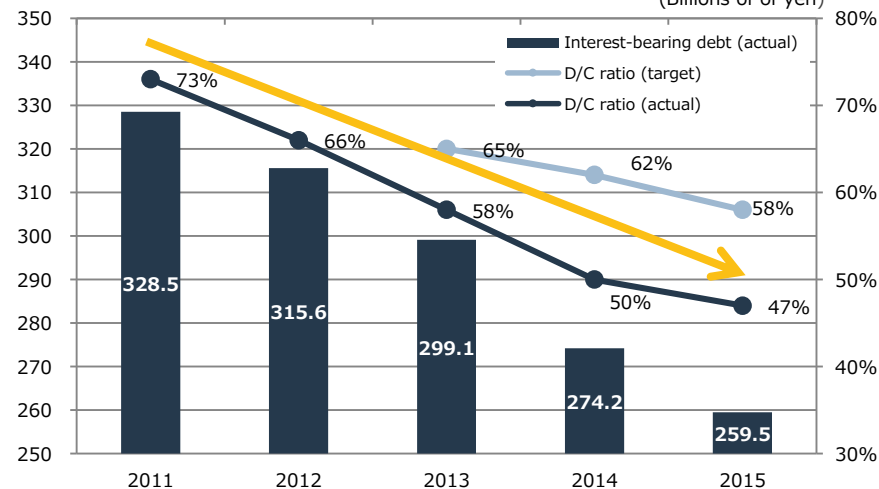
## Difference between targets and actual results for operating income and operating margin

(Billions of yen)



## Steady improvement in financial balance

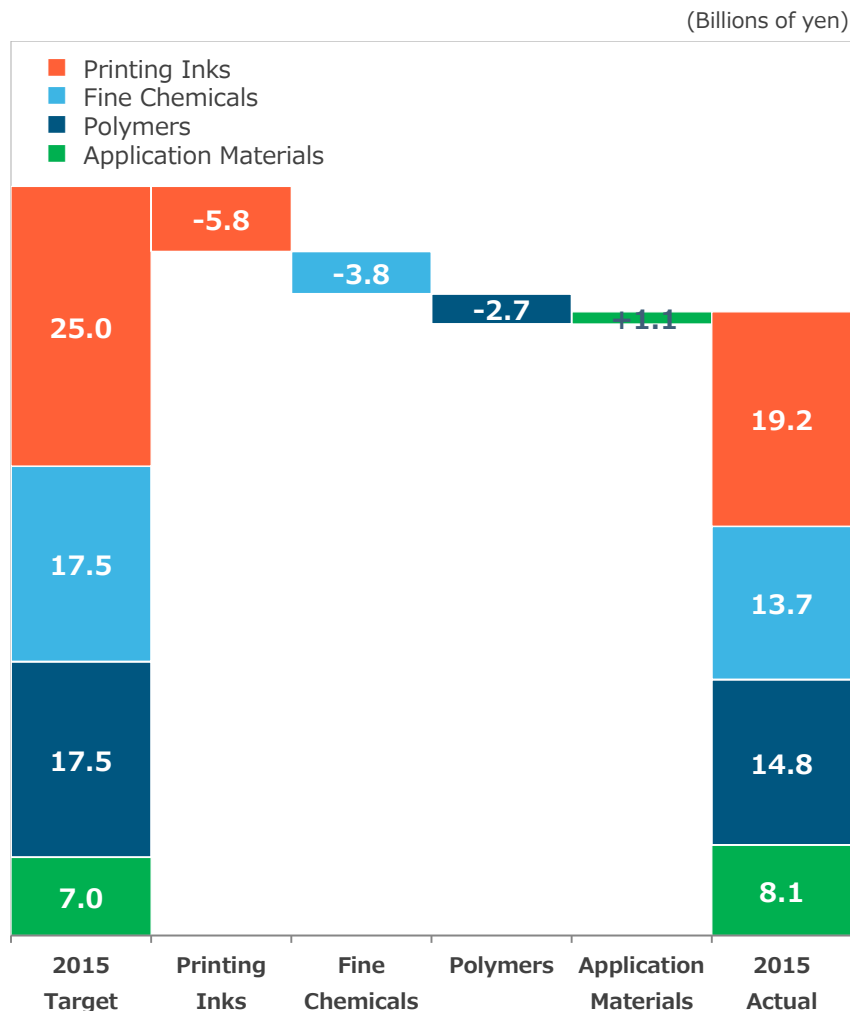
(Billions of of yen)



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

# Operating Results Trends and Summary of Achievements under DIC105 (2)

## Difference between targets and actual results for operating income by segment and analysis of contributing factors (based on previous segmentation)



Note: Graph figures do not include results for the "Others" segment and thus differ from those presented on the previous page.

### Printing Inks

- Overall, the decline in demand for publishing inks was worse than expected. While the strong dollar had a negative impact on income in North America and Europe, the weak yen and falling prices for raw materials had a positive impact.
- North America and Europe: We implemented restructuring measures and shifted our focus to the packaging inks business as planned.
- Japan: Results were considerably shy of targets, owing to falling demand and the slow pace of efforts to improve our cost structure.
- PRC: We implemented plans for a decisive production increase, but measures for low-priced products were delayed.
- India: Although efforts to rebuild our business configuration took time, results were on track for recovery.
- Oceania: The decline in demand for publishing inks was worse than expected.

### Fine Chemicals

- Liquid crystals (LCs): Despite efforts to increase market share by expanding product types and customer numbers, results fell significantly short of targets as a consequence of delays in new product development.
- Pigments: Results were brisk, led by pigments for color filters.

### Polymers

- The demand declined further than expected in Japan, while the globalization of operations and reorganization of our production configuration proceeded slowly.
- Results picked up in the second half, bolstered by falling raw materials prices, but finished substantially below targets, as structural issues pushed sales volume down and costs up.

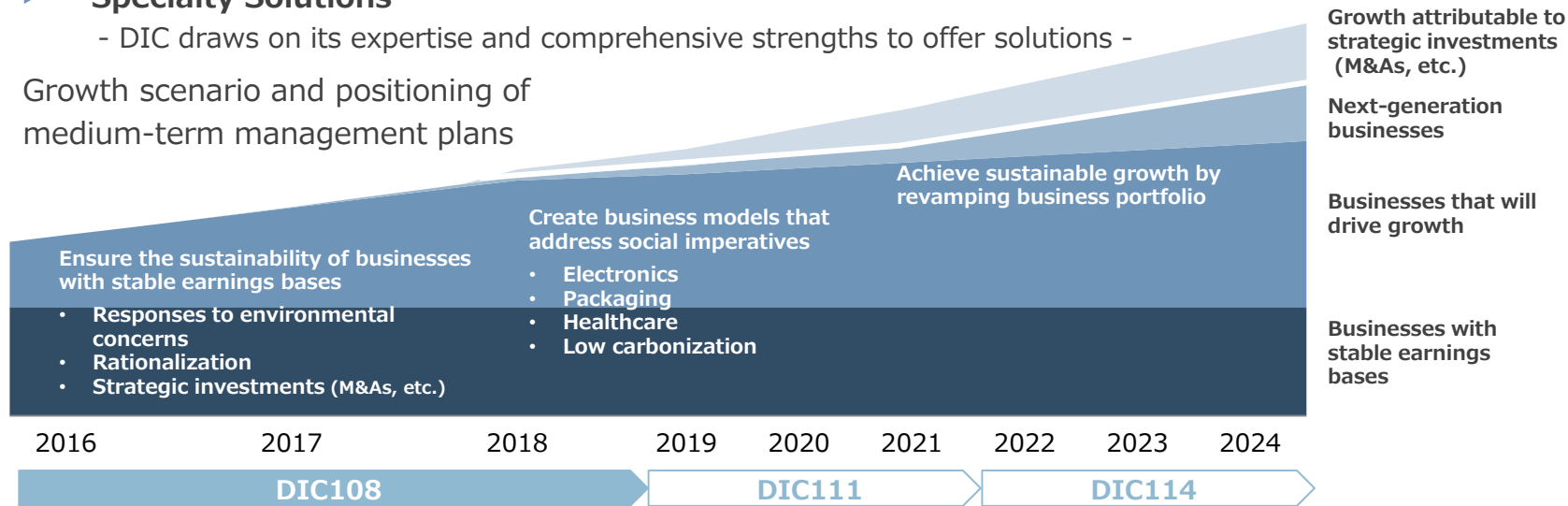
### Application Materials

- Results were robust, particularly for jet inks.

# The DIC Group's Growth Scenario

## The growth scenario based on *corporate values*

- 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**
- 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 medium-term management plans



## Three basic strategies to translate the growth scenario into reality

### 1 Business

Translate the growth scenario into reality with **four business initiatives** → P9

- Business Initiative (1): →P10/11  
**Expand Businesses that will Drive Growth**
- Business Initiative (2): →P12  
**Pursue Opportunities for Strategic Investments (M&As, etc.)**
- Business Initiative (3): →P13  
**Rationalize Operations in Mature Markets**
- Business Initiative (4): →P14  
**Create Next-Generation Businesses**

### 2 Finance

Pursue ideal financial balance with **Cash flow management** → P15

- Investment in growth:  
**Budget ¥150 billion for strategic investments**
- Financial health:  
**Keep D/C ratio\* at around 50%**
- Shareholder returns:  
**Increase dividend payout ratio to around 30%**

### 3 Management infrastructure

Support globalization and increase sophistication with **establishment of a solid management infrastructure**

- Operations: →P16  
**Strengthen Technical, R&D, Purchasing, SSCs\*\* and IT divisions globally**
- Corporate governance: →P17  
**Address the challenges in accordance with the Corporate Governance Code**

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

\*\*SSCs: Shared services centers

# Quantitative Targets

Target record operating income of ¥54 billion in the first year and ¥65 billion in the final year

(Billions of yen)

	2015 Actual	2016 Target	2017 Target	2018 Target	2018 Growth ratio (Increase from 2015)
Net sales	820.0	<b>870.0</b>	<b>920.0</b>	<b>960.0</b>	<b>+17%</b>
Operating Income	51.1	<b>54.0</b>	<b>58.0</b>	<b>65.0</b>	<b>+27%</b>
Net income	37.4	<b>25.0</b>	<b>30.0</b>	<b>40.0</b>	<b>+7%</b>
ROE	15%	<b>9%</b>	<b>10%</b>	<b>12%</b>	—
Ordinary investments	34.0	<b>120.0</b>			—
Strategic investments (M&As , etc.)	—	<b>150.0</b>			—
D/C ratio*	47%	<b>Around 50%</b>			—
Dividend payout ratio	21%	<b>Around 30%</b>			

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

Exchange rates assumption: ¥120.00/US\$1, US\$1.10/€1



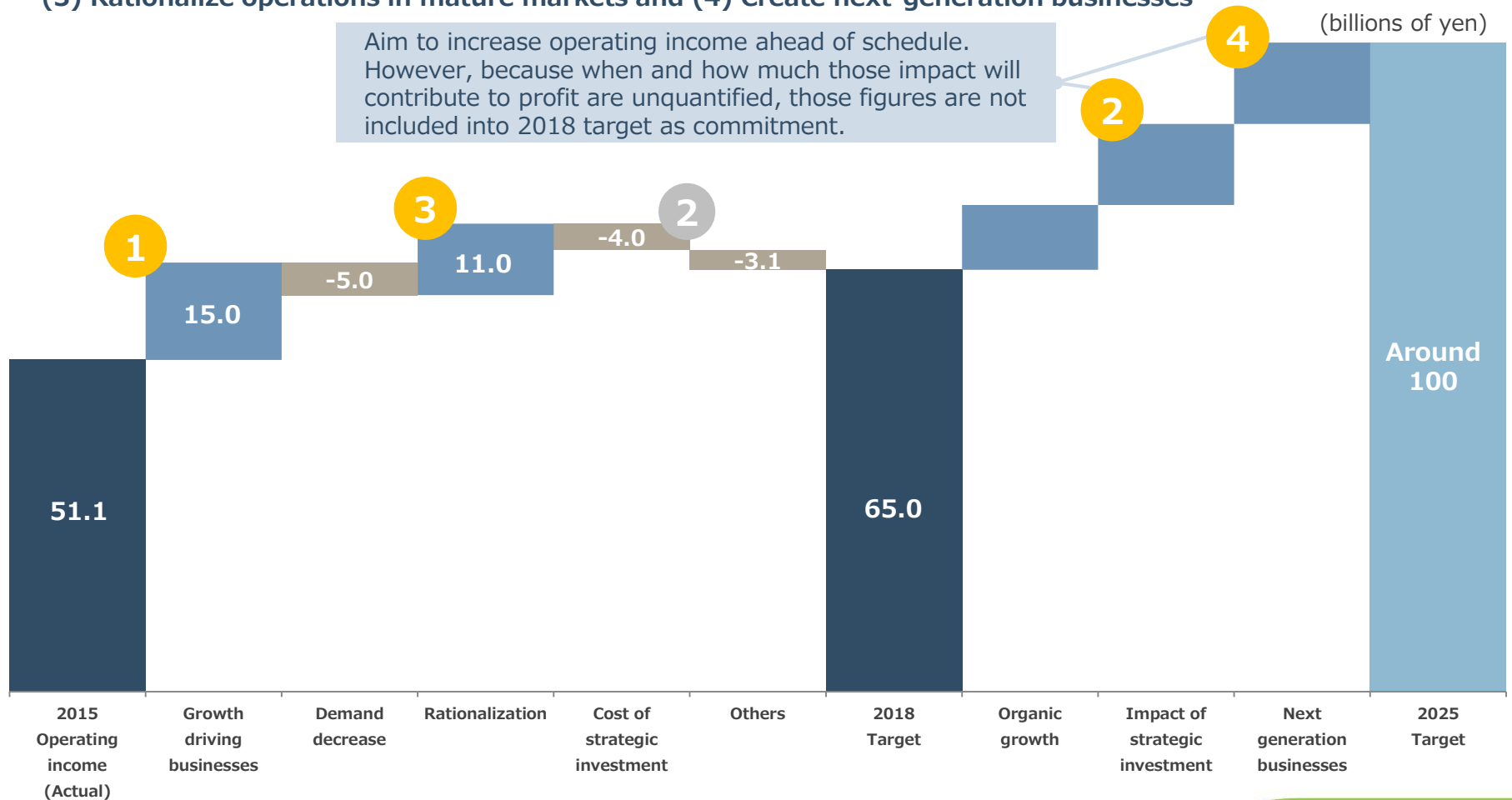
# Basic Strategies 1: Overview of Business Initiatives (Operating Income Plan)

Target operating income is 65 billion yen in the last year of DIC108 and around 100 billion yen in 2025

Four business initiatives:

- (1) Expand businesses that will drive growth, (2) Pursue opportunities for strategic investments including M&As, (3) Rationalize operations in mature markets and (4) Create next-generation businesses

Aim to increase operating income ahead of schedule. However, because when and how much those impact will contribute to profit are unquantified, those figures are not included into 2018 target as commitment.

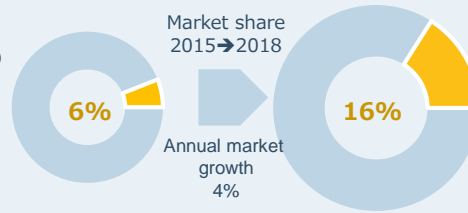


# Basic Strategies 1: Business Initiative (1) Expand Businesses that will Drive Growth (High-Performance Materials)

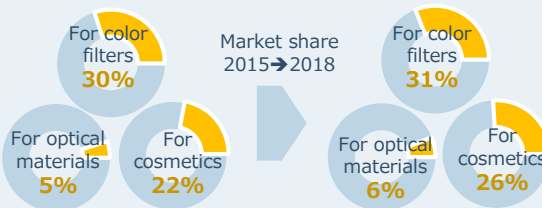
Concentrate management resources on high-performance materials with the potential for market growth and accelerate efforts to boost income

## TFT LCs

- Focus on R&D for n-type TFT LCs
- Secure share of market for LCs for LCD manufacturers in the PRC
- Increase market share by bringing new products to market

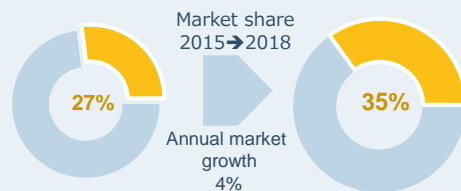


## Functional pigments



- Introduce new products in the area of processed pigments and expand sales by increasing production capacity
  - ◆ Expand portfolio of pigments for color filters
  - ◆ Increase production capacity for pigments for optical materials
  - ◆ Expand sales of pigments for cosmetics

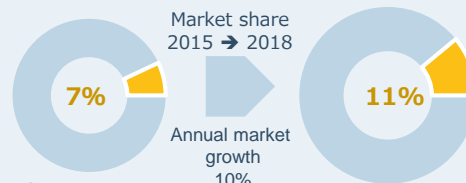
## PPS compounds



- Expand sales for automotive applications
  - ◆ Establish global supply configuration
  - ◆ Expand and improve sales and technical service facilities

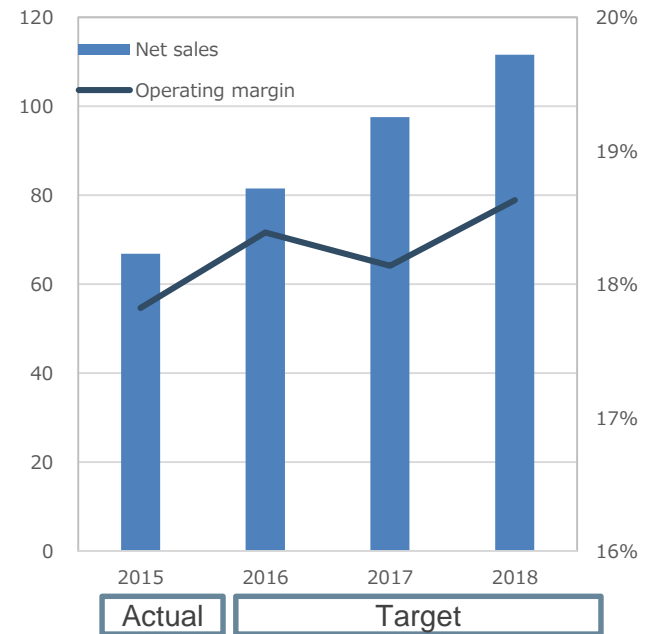
## Jet inks

- Introduce new products
  - ◆ Water-based inks for high-speed laser printers
  - ◆ Inks for textiles
  - ◆ Inks for coat papers
- Establish global production configuration



## Targets for Net Sales and Operating Margin

(Billions of yen)



# Basic Strategies 1: Business Initiative (1) Expand Businesses that will Drive Growth (Packaging Materials)

## Provide packaging solutions that satisfy the needs of customers and brand owners

### Gravure inks

- Develop inks with a lower environmental impact
- Increase share of Asian market for mid-range and low-priced products
- Improve sales configuration for global customers

### Flexo inks

- Leverage group technologies in North America and Europe to increase market share in Asia
  - ◆ Standardize product specifications globally
  - ◆ Establish production, supply and technical services configurations

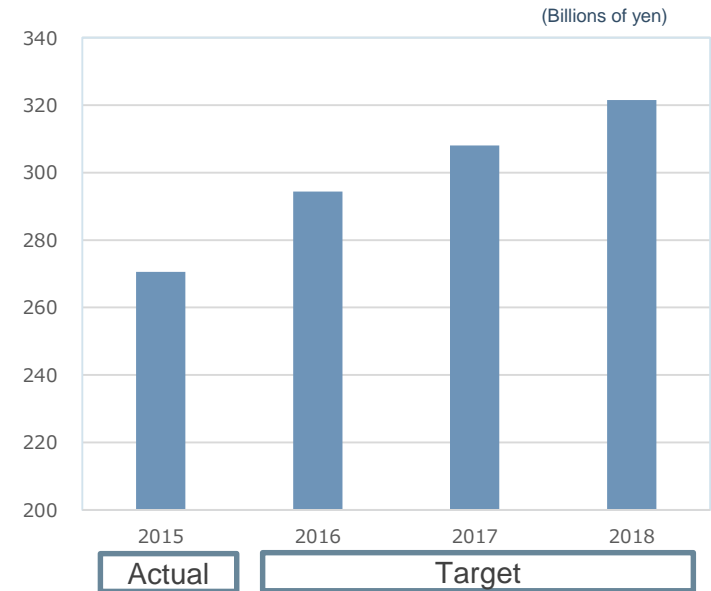
### Packaging adhesives

- Position as strategic products and promote cross-selling with gravure inks
- Develop and introduce products to fill the needs for each market such as solvent-free adhesives
- Introduce products with gas barrier properties

### Films

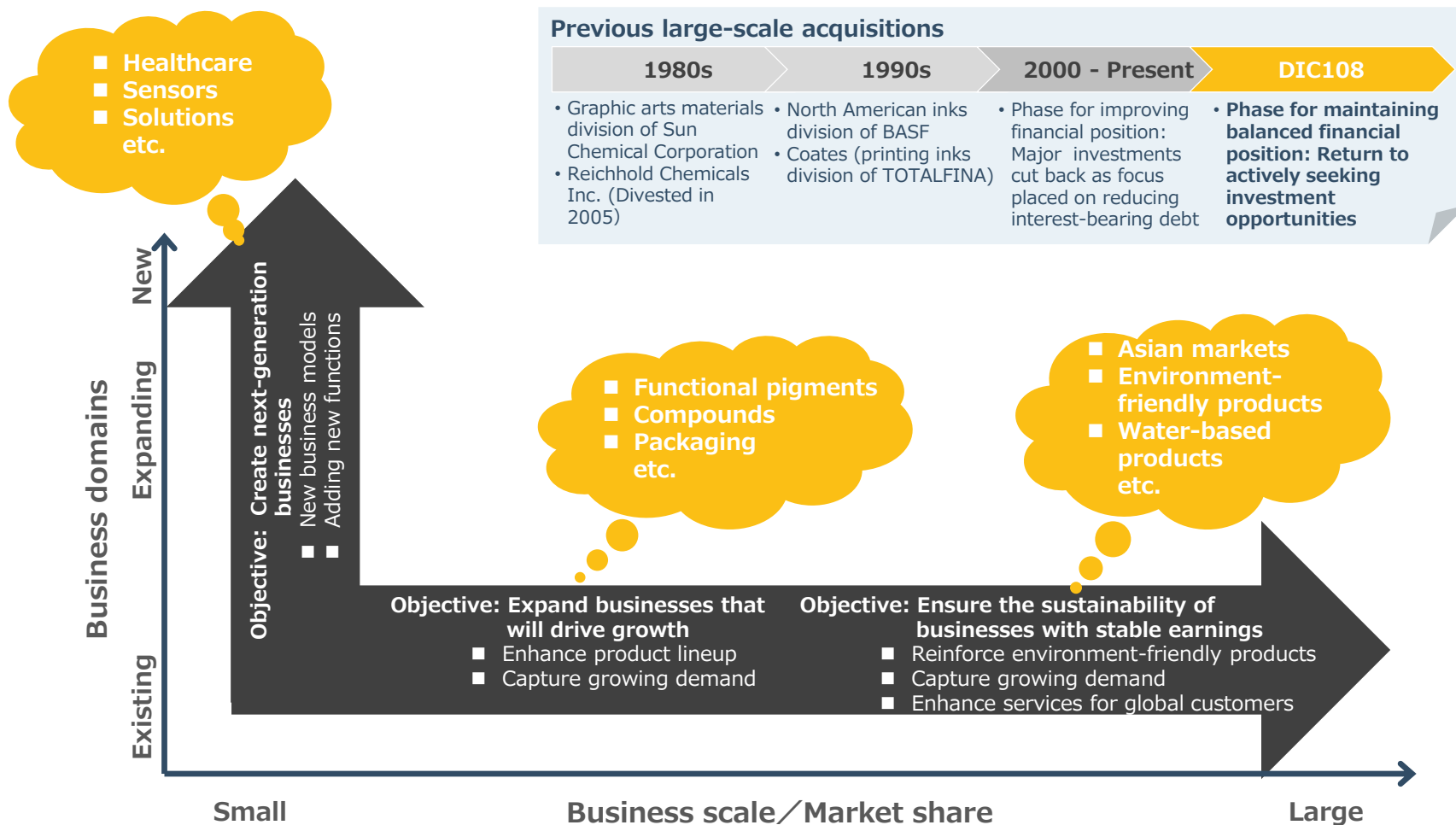
- Rationalize production in Japan
- Expand operations in Asia
  - ◆ Capitalize on increase in demand associated with the shift of food processing bases to Southeast Asia
  - ◆ Enter retortable film market by offering differentiated products

### Targets for Net Sales



# Basic Strategies 1: Business Initiative (2) Pursue Opportunities for Strategic Investments (M&As, etc.)

Set up 150 billion yen budget for strategic investments for the three years

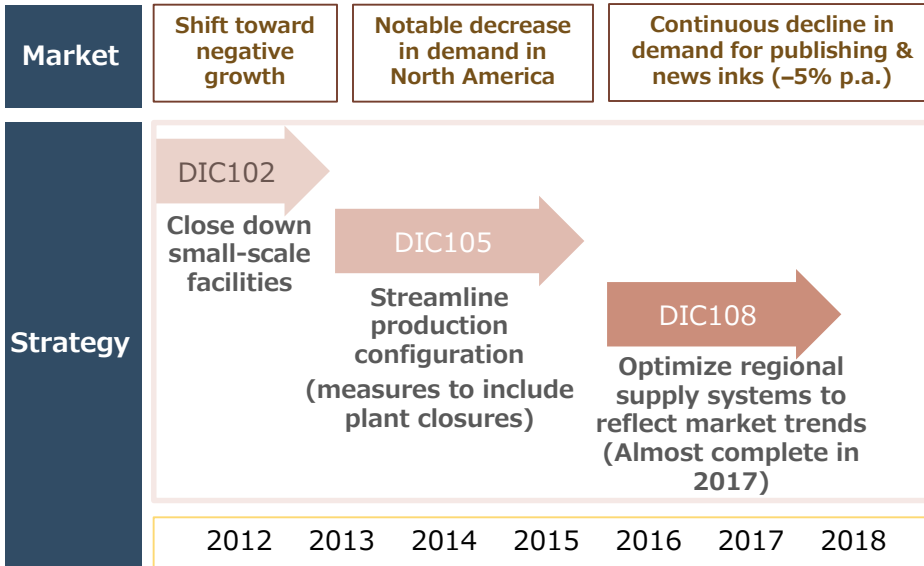


## Previous large-scale acquisitions

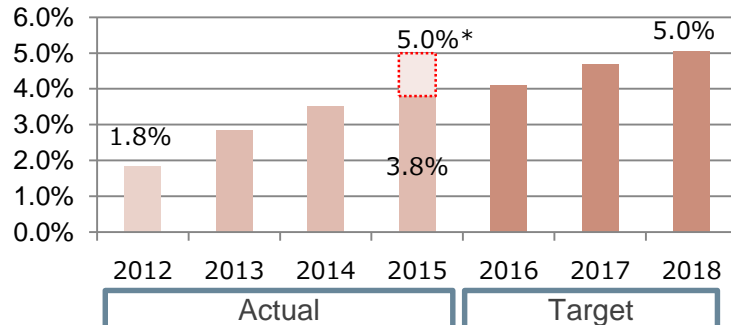
1980s	1990s	2000 - Present	DIC108
<ul style="list-style-type: none"> <li>• Graphic arts materials division of Sun Chemical Corporation</li> <li>• Reichhold Chemicals Inc. (Divested in 2005)</li> </ul>	<ul style="list-style-type: none"> <li>• North American inks division of BASF</li> <li>• Coates (printing inks division of TOTALFINA)</li> </ul>	<ul style="list-style-type: none"> <li>• Phase for improving financial position: Major investments cut back as focus placed on reducing interest-bearing debt</li> </ul>	<ul style="list-style-type: none"> <li>• Phase for maintaining balanced financial position: Return to actively seeking investment opportunities</li> </ul>

# Basic Strategies 1: Business Initiative (3) Rationalize operations in mature markets

## Publishing inks in North America and Europe: Optimize regional supply systems



Operating margin for printing inks (publishing inks and packaging inks) in North America and Europe



\*Achieved 5.0% excluding the impact of foreign currency exchange, against DIC105 target of 4.2%. Targets for 2016 and beyond are calculated using DIC108 exchange rates assumptions.

## Mature businesses in Japan: Drastic Restructure on the assumption of demand decrease



### Publishing inks

- Restructure production, including by closing down production facilities for publishing inks
- Restructure sales and technical R&D configuration, focusing on efficiency

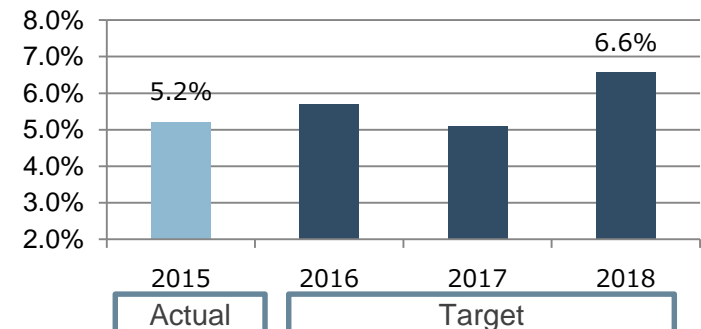
### Polymers

- Optimize production configuration for mature products

### Support departments

- Reduce raw material costs by promoting Group procurement
- Reduce back-office department costs

Operating margin for printing inks and polymers in Japan



# Basic Strategies 1: Business Initiative (4) Create Next-Generation Businesses

## Create business models that address social imperatives

- Pursue value for consumers and brand owners
- Shift from product development to business model-conscious business development

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- Establish multiple strengths by integrating technical departments
- Actively utilize external resources through open innovation

Social imperatives

Environmental sustainability  
Health, safety and peace of mind  
Creation of a smart society that capitalizes on the IoT, Big Data and AI

Area

Electronics

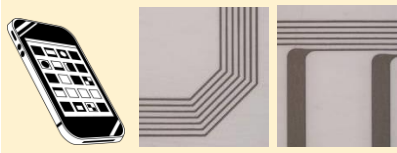
Packaging

Healthcare

Low carbonization

Next-generation products

- Materials for printed electronics
- Heat-resistant & heat-dissipating materials
- Inorganic nanomaterials



- Gas barrier materials
- Next-generation packaging materials



- Health foods
- Materials for medical devices



- Algae-derived oils
- Inks with a lower environmental impact
- Polymers with a lower environmental impact



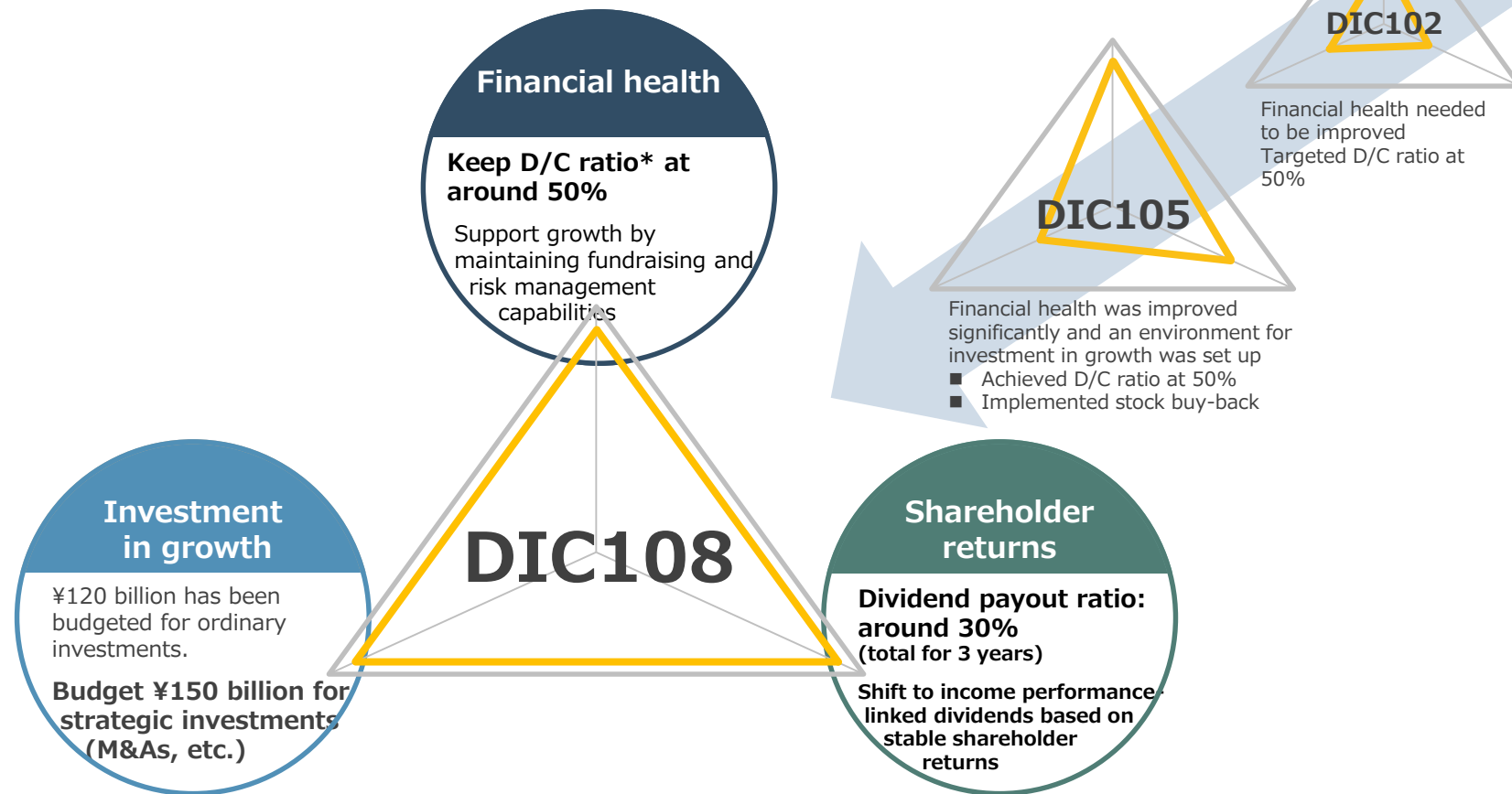
Image of business models

Acceptance through open innovation  
Collaboration with manufacturers of devices and finished products  
Solutions that reduce environmental impact  
Color management systems

# Basic Strategies 2: Cash Flow Management

Strive to balance investment in growth, financial health and shareholder returns with the aim of maximizing future shareholder value

- In DIC108, enhance virtuous circle of quality investment in growth and cash flow from operating activities



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

# Basic Strategies 3: Establishment of a solid Management Infrastructure (Operation)

## Establish global infrastructure and systems to facilitate the implementation of business strategies

### Technical Develop technologies essential to strategies and the sustainability of businesses

- Shift resources to overseas markets
  - ◆ Develop global/regional standard products (printing inks, polymers)
  - ◆ Increase sales by reinforcing local technical services (polymers)
- Concentrate resources on strategic products
  - ◆ Businesses that will drive growth: Promote growth by utilizing facilities outside Japan (PPS: Frankfurt and Shanghai; LCs: Qingdao and the ROK)
  - ◆ Making businesses sustainable:
    - Inks and adhesives with a lower environmental impact
    - Waterborne and solvent-free polymers
- Commercialize products developed by the Product Innovation Center (established in 2013)
  - ◆ New UV inks, gravure inks (products with improved printability)
  - ◆ Adhesives with gas-barrier properties
  - ◆ Industrial-use jet inks

### R&D Create a framework encompassing all stages from R&D through to the creation of new businesses

- Utilize “open innovation”
  - ◆ Collaborate with universities, external research institutes and other companies
  - ◆ Begin making CVC\* investments in January 2016 to strengthen cooperation with start-up companies
- Set up an advanced technology building in the Central Research Laboratories
  - ◆ Support advanced materials development by installing an ultrahigh-resolution transmission electron microscope
  - ◆ Install applied evaluation equipment for printed electronics materials
- Increase R&D staff numbers to strengthen basic technologies for polymers, engineering plastics and inks

### Purchasing Implement “One Company Buying”

- Clarify combinations of suppliers and grades that can be used commonly worldwide (AS area\*\*)
- Narrow the number of suppliers, which currently differs depending on regional headquarters, down to three or four key global suppliers (AS area)
- Expand AS area by consolidating product lines in terms of technical and sales divisions involved
  - Benefit
    - Raw materials cost reduction: ¥1.5 billion

### SSC\*\*\* Establish SSCs in the Asia-Pacific region

- Japan: Expand business categories to be covered by SSCs and make use of outsourcing
- PRC: Set up SSC to cover 14 companies in the region
- Southeast Asia: Set up an SSC for individual countries (Thailand, Malaysia and Indonesia)
  - Benefits
    - Cost reduction: ¥0.2 billion
    - Improvements in governance and quality of operations thanks to integration of business processes and rules

### IT Establish infrastructure to support global operations

- Expand use of SAP ERP system utilization, deployment of which was completed globally under DIC105
- Establish system to facilitate the timely provision of globally standardized management indices (management cockpit)
  - Commence operation in 2016 and expand gradually thereafter
- Benefits
  - Contribution to streamlining of supply chain, optimization of inventories and reduction of costs: ¥1.0 billion
  - Acceleration of the decision-making process

\* CVC: Corporate venture capital (investment of corporate funds in start-up companies to fund seed technologies and business ideas)

\*\* AS area: Addressable Spend (combinations of suppliers and grades that can be used commonly worldwide)

\*\*\* SSCs: Shared services centers



# Basic Strategies 3: Establishment of a Solid Management Infrastructure (Corporate Governance)

## Initiatives aimed at increasing the trust of stakeholders and enhancing corporate value

	Current status
<b>Overall</b>	<p><b>Systematize initiatives implemented to address various challenges in accordance with Corporate Governance Code</b></p> <ul style="list-style-type: none"> <li>• 2016 Establishes policy on corporate governance</li> </ul>
<b>The DIC WAY</b>	<p><b>Formulate basic management policy to serve as the basis for medium- and long-term efforts to enhance corporate value</b></p> <ul style="list-style-type: none"> <li>• 2008 Establishes The DIC WAY to mark 100th anniversary</li> <li>• 2016 Revises The DIC WAY to reflect changing imperatives</li> </ul>
<b>Management system</b>	<p><b>Accelerate business execution and clarify responsibility by separating decision making and execution</b></p> <ul style="list-style-type: none"> <li>• 2002 Changes directors' term of office from two years to one year</li> <li>• 2004 Adopts executive officer system</li> <li>• 2005 Abolishes system of retirement allowances to executives</li> <li>• 2008 Appoints two outside directors</li> <li>• 2009 Establishes committees, each including two outside directors, to oversee the selection of and determine compensation for executives</li> <li>• 2015 Sets criteria for evaluating the independence of outside directors Begins analyzing and evaluating the performance of the Board of Directors</li> </ul>
<b>Sustainability</b>	<p><b>Achieve sustainable growth in a manner that takes into account, among others, the environment, ecosystems and socioeconomic issues</b></p> <ul style="list-style-type: none"> <li>• 2007 Launches CSR program</li> <li>• 2014 Changes designation of program from "CSR" to "sustainability"</li> <li>• 2015 <ul style="list-style-type: none"> <li>• Selected for inclusion in the Dow Jones Sustainability Indices Asia/Pacific Index</li> <li>• Awarded a score of 98 out of 100 for information disclosure and a performance class of A- (the best score is A) for climate change initiatives in the Japan edition of CDP's annual climate change report</li> </ul> </li> </ul>
<b>Diversity</b>	<p><b>Understand and respect diversity and develop corporate culture which generates creative thinking</b></p> <ul style="list-style-type: none"> <li>• Appoints foreign nationals to executive positions (1962–71, 1990–2002, 2011–present)</li> <li>• Expands career opportunities for women (female employees in management positions (DIC headquarters): 2.5% at present → 5% by early 2019)</li> <li>• Expands career opportunities for disabled individuals (employment rate at DIC headquarters: 2.0% at present → 2.2% by early 2019)</li> <li>• Global human resources management <ul style="list-style-type: none"> <li>➢ Plans to introduce global job grading system (2018)</li> <li>➢ Promotes global talent management</li> </ul> </li> </ul>
<b>Code of conduct</b>	<p><b>Establish a code of business conduct that encompasses not only obeying laws but also acting in keeping with social norms and in a manner that responds to stakeholders expectations</b></p> <ul style="list-style-type: none"> <li>• 2008 Establishes The DIC WAY Code of Business Conduct (applicable to the entire DIC Group with the exception of Sun Chemical)</li> <li>• 2014 Establishes the DIC Group Code of Business Conduct (applicable to the entire DIC Group) and set up a multilingual reporting system</li> </ul>
<b>Disclosure of information, etc.</b>	<p><b>Secure the understanding and trust of stakeholders by ensuring the transparency and fairness of management</b></p> <ul style="list-style-type: none"> <li>• 1974 Publishes first annual report</li> <li>• 2013 Standardizes December fiscal year-end for the entire DIC Group</li> <li>• 2016 Establishes a policy for promoting constructive dialogue with shareholders and guidelines governing the cross holding of shares</li> </ul>

# Outline of Segment Targets

Promote strategies that reflect each segment's long-term positioning and objectives

(Billions of yen)

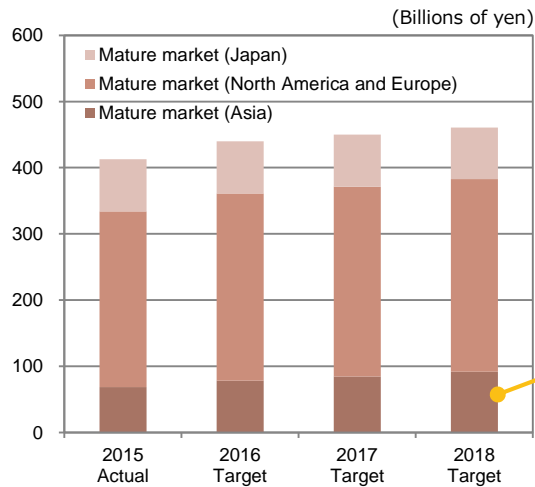
	Target Markets*	Positioning	Challenges	Objectives	Quantitative Targets (Upper row: Net sales, Lower row: Operating income)			
	Core Products*				2015 Actual	2016 Target	2017 Target	2018 Target
	Basic Technologies*							
Printing Inks	Packaging inks	Group's principal core business	Restructure businesses in mature markets	Increase volume of packaging inks with the aim of expanding market share	412.6	439.9	449.8	460.9
	Liquid inks				19.0	21.4	24.7	27.6
	Optics and color							
Fine Chemicals	Electronics	Growth driver with high added value	Develop new products	Increase market share by promoting continuous product development	142.0	155.2	168.1	178.4
	Optronics materials							
	Organic molecular design				13.1	14.6	17.5	20.0
Polymers	Coatings	Second core business	Concentrate resources on products and regions that promise growth	Pare down portfolio of strategic products and take on the challenge of global expansion	194.6	198.4	205.2	214.1
	Surface protection materials							
	High-performance composites				16.0	15.8	16.6	18.0
Compounds	Digital printing materials	Growth driver with combining basic technologies	Expand applications	Accelerate the establishment of development and production systems in growing business areas	63.6	70.4	78.9	87.0
	Liquid inks				5.7	5.0	6.3	8.6
	Dispersions							
Application Materials	Electronics	Offers new growth model	Restructure unprofitable businesses	Accelerate realignment of business portfolio	57.5	58.9	61.5	64.3
	Adhesive materials							
	Applicability assessment				2.1	2.9	3.7	4.5

\* The target markets, core products and basic technologies of DIC's business domains are shown in Supplementary Materials 2 (page 25).

## Business policies

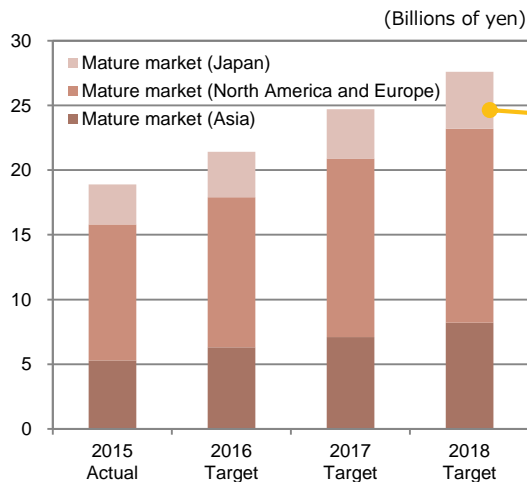
**Publishing inks in Japan, North America and Europe: Continue restructuring production configuration on the assumption that demand will decline. Packaging inks: Work to secure the top market share**

## Net sales targets



Growth in Asia (compared with 2015) **+34%**

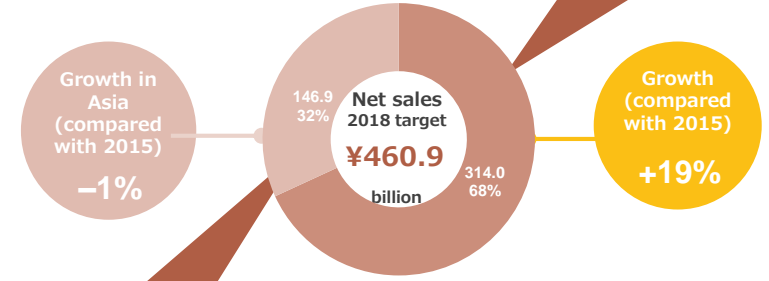
## Operating income targets



Growth (compared with 2015) **+45%**

## Packaging inks and adhesives

- Increase market share by proposing environmental solutions
- Expand growing flexo ink business in North America and Europe by utilizing proprietary technologies



## Publishing inks

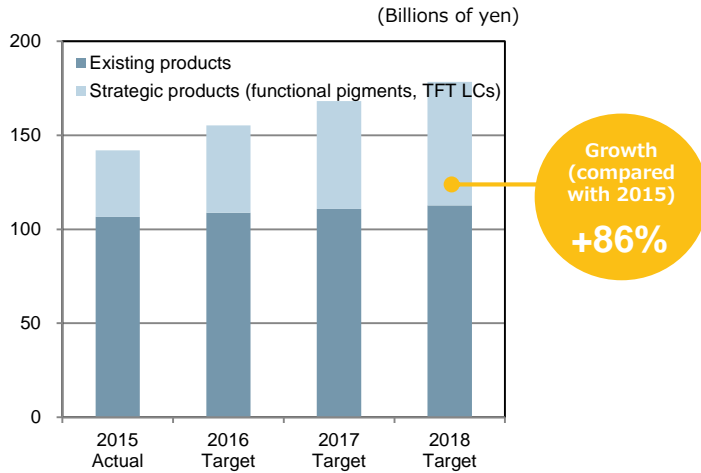
- Secure profitability by restructuring production on the assumption that demand will decline and streamline sales and technical organizations
- Launch energy-efficient inks

## Regional strategies

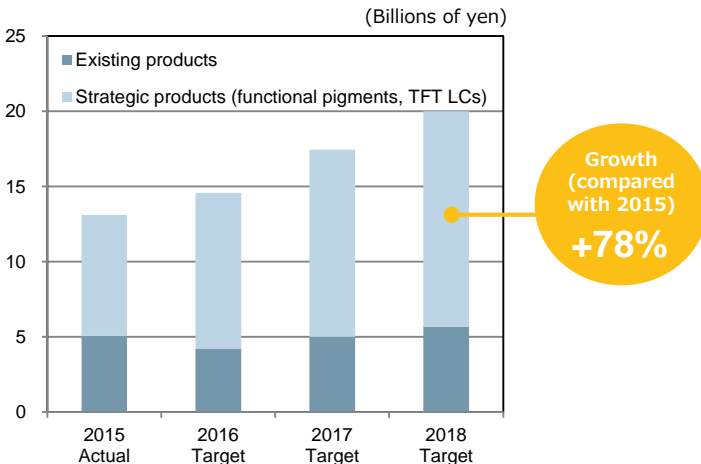
- |                                   |  |
|-----------------------------------|--|
| <b>Japan</b>                      | <ul style="list-style-type: none"> <li>• Restructure business configuration and revamp business model</li> <li>• Actively develop and launch high-performance products that tap into market needs, starting with inks that have a lower negative environmental impact</li> </ul> |
| <b>Asia</b>                       | <ul style="list-style-type: none"> <li>• Expand capacity of mother plants (India and the PRC)</li> <li>• Launch products with consistent brand names by consolidating products and raw materials</li> </ul>  |
| <b>North America &amp; Europe</b> | <ul style="list-style-type: none"> <li>• Optimize regional supply systems to reflect market trends</li> <li>• Expand sales of adhesives and coatings by utilizing Japanese technologies</li> <li>• Expand geographic coverage in South America &amp; Middle East</li> </ul>      |

**Business policies** Enhance competitive edge by focusing the investment of resources in high-value-added products, thereby accelerating the growth of strategic products and ensuring the stability of existing products

**Net sales targets**



**Operating income targets**



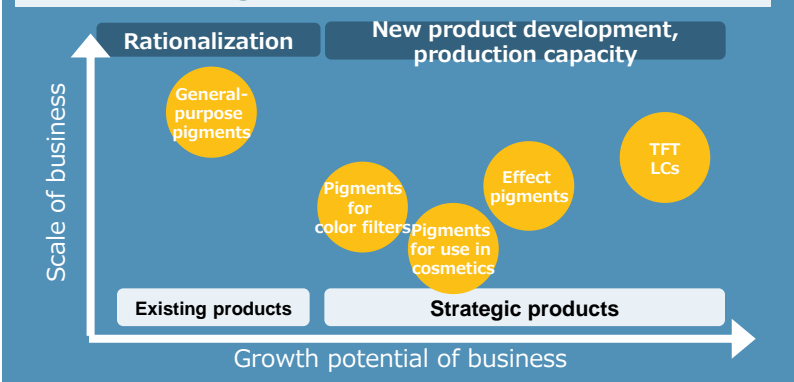
## Pigments

- Shift focus from commoditized products\* to specialty products and growth markets
  - Expand lineup of pigments for color filters
  - Expand effect pigments business acquired in Europe and shift emphasis to high-value-added products
  - Increase sales of pigments for use in cosmetics in Japan and emerging markets
- Rationalize production facilities for general-purpose pigments

## LCs

- Focus resources on n-type TFT LCs and launch new products
  - Accelerate development by enhancing evaluation technologies
- Capture demand in the PRC by capitalizing on production and technical service facilities

## Investment targets

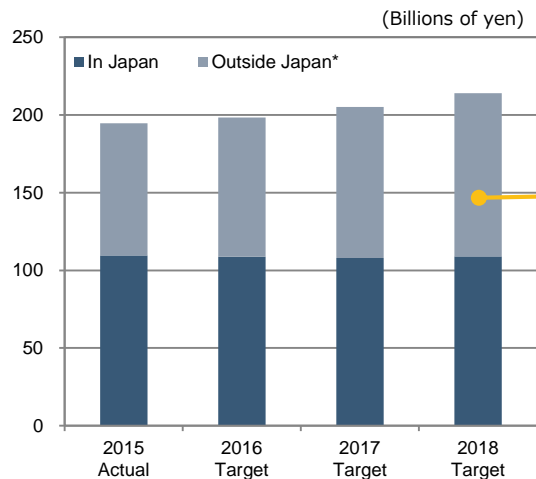


\*Commoditized products: Pigments for inks, coatings and plastics

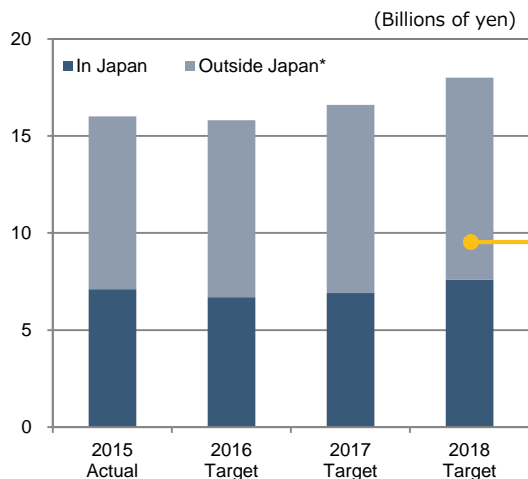
## Business policies

Concentrate management resources on strategic products (saturated polyester, polyurethane, acrylic and UV-curable resins) and accelerate global development with a focus on promising applications and growth markets

## Net sales targets



## Operating income targets



\*"Outside Japan" includes exports from Japan.

## Strategic product portfolio

- Expand business with a focus on products for use in coatings and adhesives in Asia
  - Capitalize on technical facilities in Thailand and the PRC
    - Develop global/regional standard products
    - Strengthen lineup of environment-friendly products, including waterborne and solvent-free offerings
  - Establish locally led framework for expanding sales of UV-curable resins and reactive hot melt adhesives to uncover local needs
- In Japan, capture demand for UV-curable resins for niche and high-performance applications

## Regional strategies

- Rationalize production across Asia
  - In growth markets, establish contained development, production and sales configuration
  - In mature markets, consolidate facilities
- Reorganize sales configuration in Southeast Asia by strategy, shifting from the current region/country-based organization
  - Accelerate business expansion in emerging markets and capture untapped demand

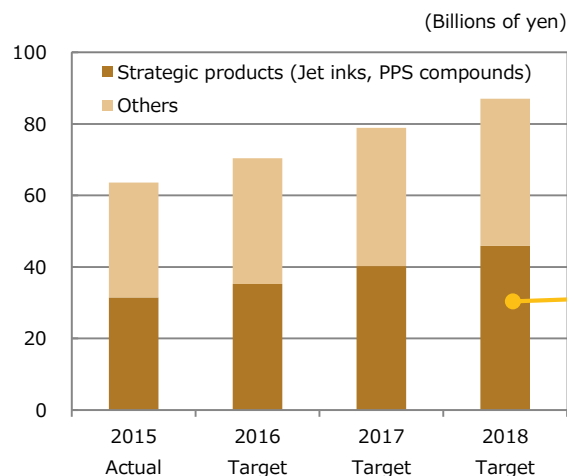
## Other strategies

- Promote strategic procurement of raw materials
  - Enhance and optimize global sourcing
  - Switch to lower-cost raw materials by establishing global standards for product design

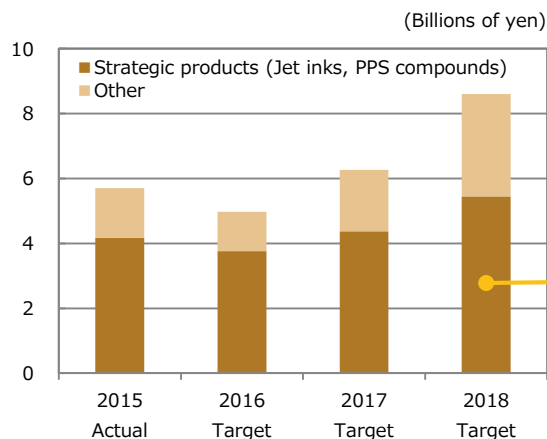
## Business policies

Introduce new products which satisfy the needs of users to the market continuously with composite and dispersion technologies and realize growth which exceeds market growth rate

## Net sales targets



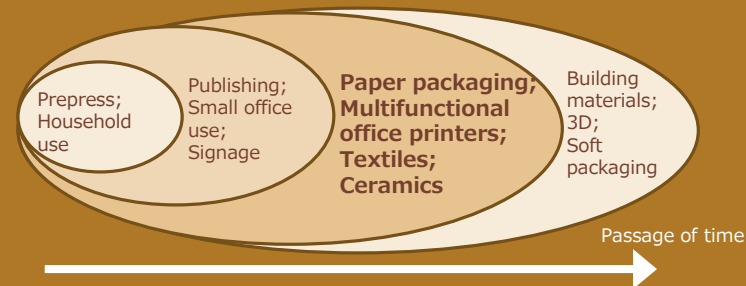
## Operating income targets



## Jet inks

- Expand business by introducing new products to growth markets and new markets
  - Seek to boost sales in tandem with market expansion (multifunctional office printers, paper packaging and signage)
  - Launch new businesses (textiles and ceramics)

## Achieve rapid growth with the expansion of applications



## PPS compounds

- Continue working to expand sales for automotive applications and establish a global supply system
  - Increase production capacity through the construction of new and expansion of existing facilities
    - New facility for compounds in the PRC (2016)
    - Additional facility for neat resins in Japan (2017)
  - Increase number of employees in sales and technical services for key automotive manufacturer and Tier 1 customers

**Business policies**

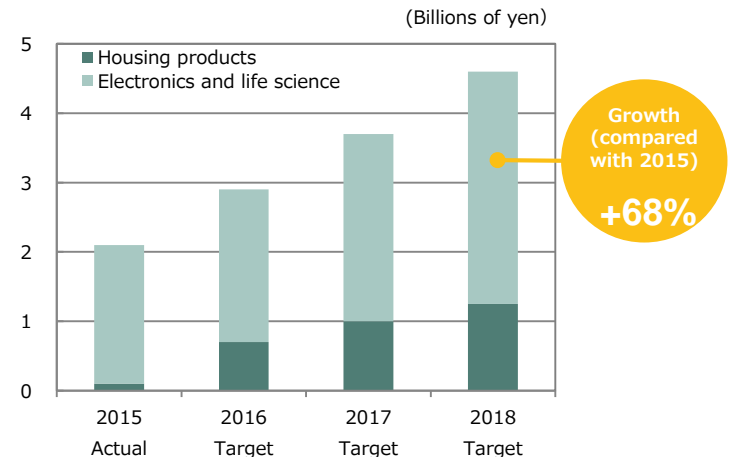
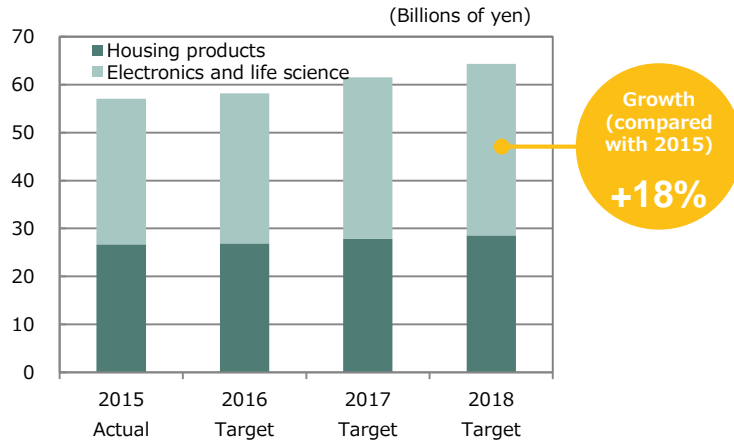
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**Net sales targets**

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**Operating income targets**

Position electronics and life sciences as growth businesses and promote decisive rationalization in housing products



## Electronics and life sciences

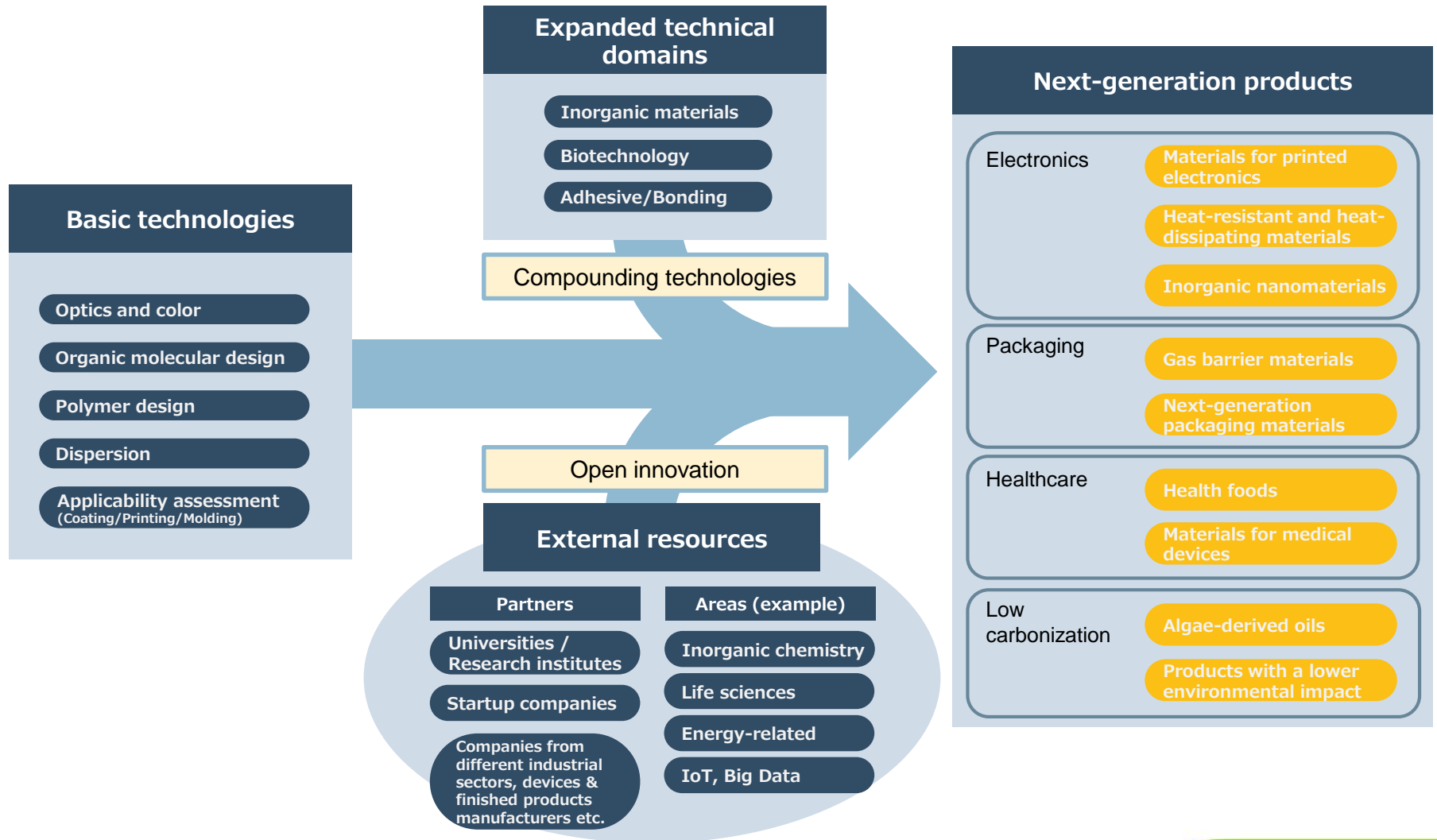
- Adhesive tape for industrial use
  - Appeal to global brand owners to expand use for smartphones and tablet computers
  - Promote the integrated management of sales bases in the PRC to accelerate spec-in initiatives with rapidly growing local brand owners
  - Enter the market for vehicle-mounted displays
- Hollow-fiber membrane modules
  - Sustain high growth of degassing modules for inkjet printers, for which DIC holds the leading global market share
  - Enter the market for large degassing module for water treatment applications
  - Investment to increase production capacity: ¥0.8 billion
- Health foods
  - Expand sales of Linablue (natural food coloring) in North America and Europe
  - Reposition Spirulina, a highly rated superfood, as a functional food product, i.e., shift from B to C to B to B business model
  - Investment to increase production capacity of Linablue : 0.9 billion yen

## Housing products

- Unsaturated polyester resin molded products
  - Promote decisive cost reductions and improve profitability by implementing structural reforms
- Laminated products
  - Revamp DIC200 business model
  - Implement dramatic structural reforms

# Supplementary Materials 1: Initiatives Implemented by Technical and R&D Groups

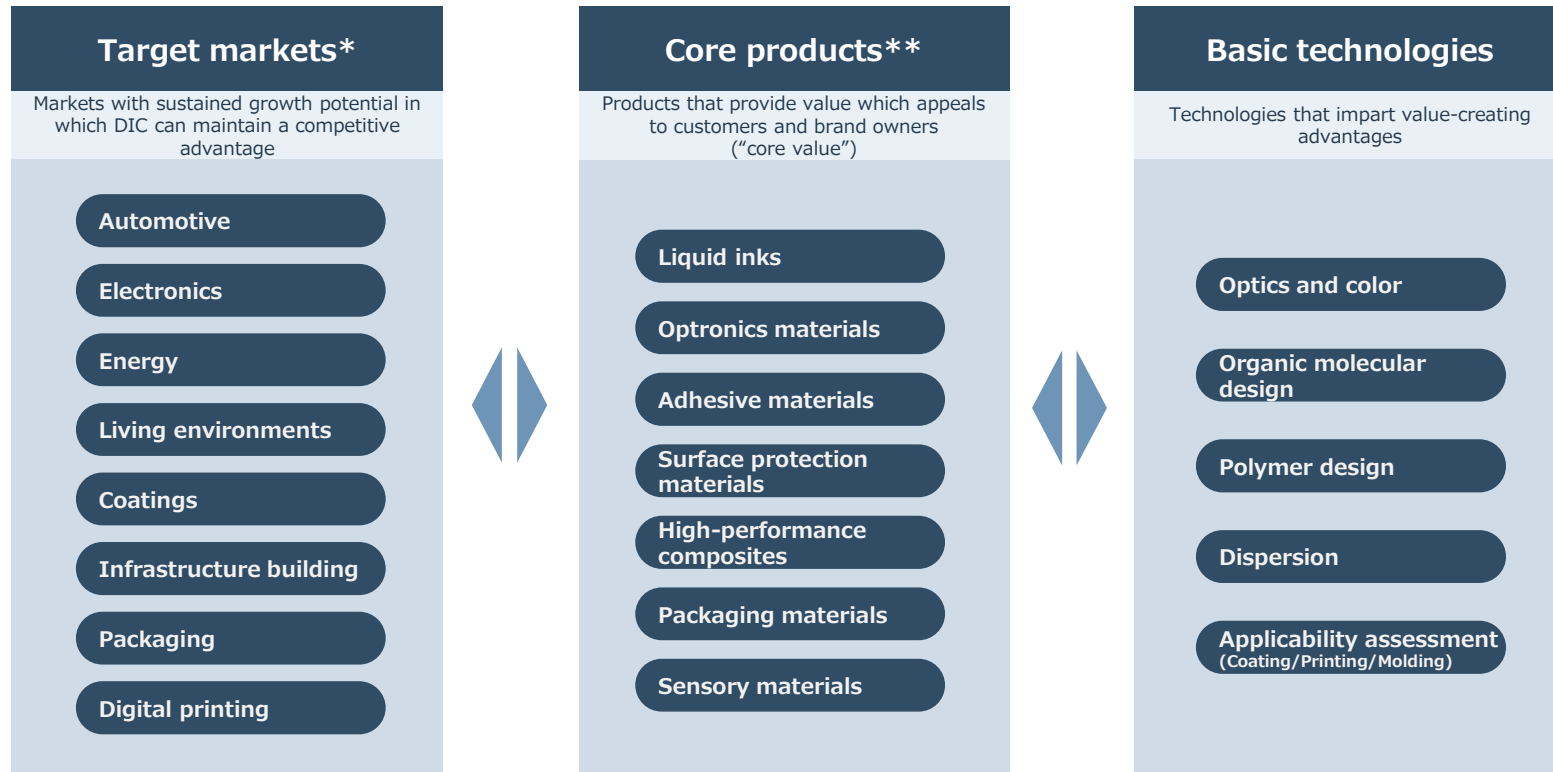
Develop next-generation products with compounding technologies and through open innovation





# Supplementary Materials 2: Key Business Domains

Combine target markets, core products and basic technologies



\*Target markets: Markets that are expected to see stable growth and in which management resources (basic technologies) position DIC to offer solutions that respond to the performance needs of consumers and brand owners

\*\*Core products: Differ from DIC's segment breakdown and are based on core value delivered to users

# Supplementary Materials 3: New Segments and Product Divisions

Changes are shown in red

Until Dec. 2015

Segment	Printing Inks	Fine Chemicals	Polymers	Application Materials	
Product Division -Principal products	<b>Printing Inks</b> <ul style="list-style-type: none"> <li>- Offset inks</li> <li>- Gravure inks</li> <li>- Flexo inks</li> <li>- Can coatings</li> <li>- News inks</li> <li>- Packaging adhesives</li> <li>- Printing supplies</li> </ul>	<b>Fine Chemicals</b> <ul style="list-style-type: none"> <li>- Organic pigments</li> <li>- Effect pigments</li> <li>- LC materials</li> <li>- Alkylphenols</li> <li>- Metal carboxylates</li> <li>- Sulphur chemicals (lubricant adhesives)</li> </ul>	<b>Polymers</b> <ul style="list-style-type: none"> <li>- Alkyd resins</li> <li>- Polyester resins</li> <li>- Unsaturated polyester resins</li> <li>- Plasticizers</li> <li>- Waterborne resins</li> <li>- Acrylic resins</li> <li>- Methacrylate resins</li> <li>- Amino resins</li> <li>- Phenolic resins</li> <li>- Polystyrene</li> <li>- Epoxy resins</li> <li>- UV-curable resins</li> <li>- Polyurethane resins</li> <li>- Fluorochemicals</li> <li>- Processed SMC products</li> </ul>	<b>Liquid Compounds</b> <ul style="list-style-type: none"> <li>- Jet inks</li> <li>- Fiber and textile colorings</li> <li>- Coatings for building materials</li> <li>- UV-curable coatings and bonding adhesives for optical discs</li> <li>- High-performance adhesives</li> <li>- UV- and EB-curable coatings</li> </ul>	<b>Processed Products</b> <ul style="list-style-type: none"> <li>- Plastic containers</li> <li>- Adhesive tape for industrial use</li> <li>- Label stock for printers</li> <li>- Magnetic and coated foils for industrial use</li> <li>- Decorative boards and interior housing products</li> <li>- Decorative interior sheets</li> <li>- Hollow-fiber membrane modules</li> <li>- Health foods</li> </ul>
	<b>Solid Compounds</b> <ul style="list-style-type: none"> <li>- PPS compounds</li> <li>- High-performance compounds</li> <li>- Plastic colorants</li> <li>- High-performance optical materials</li> <li>- Coextruded multilayer films</li> </ul>				

From Jan. 2016

Segment	Printing Inks	Fine Chemicals	Polymers	Compounds	Application Materials
Product Division -Principal products	<b>Printing Inks</b> <ul style="list-style-type: none"> <li>- Offset inks</li> <li>- Gravure inks</li> <li>- Flexo inks</li> <li>- Can coatings</li> <li>- News inks</li> <li>- Packaging adhesives</li> <li>- Printing supplies</li> </ul>	<b>Pigments</b> <ul style="list-style-type: none"> <li>- Organic pigments</li> <li>- Effect pigments</li> <li>- Metal carboxylates</li> <li>- Sulphur chemicals</li> </ul>	<b>Polymers</b> <ul style="list-style-type: none"> <li>- Alkyd resins</li> <li>- Polyester resins</li> <li>- Unsaturated polyester resins</li> <li>- Plasticizers</li> <li>- Waterborne resins</li> <li>- Acrylic resins</li> <li>- Methacrylate resins</li> <li>- Amino resins</li> <li>- Phenolic resins</li> <li>- Polystyrene</li> <li>- Epoxy resins</li> <li>- UV-curable resins</li> <li>- Polyurethane resins</li> <li>- Fluorochemicals</li> <li>- Alkylphenols</li> </ul>	<b>Liquid Compounds</b> <ul style="list-style-type: none"> <li>- Jet inks</li> <li>- Fiber and textile coatings</li> <li>- UV-curable coatings and bonding adhesives for optical discs</li> <li>- High-performance adhesives</li> <li>- UV- and EB-curable coatings</li> </ul>	<b>Application Materials</b> <ul style="list-style-type: none"> <li>- Plastic containers</li> <li>- Adhesive tape for industrial use</li> <li>- Label stock for printers</li> <li>- Magnetic and coated foils for industrial use</li> <li>- Decorative boards and interior housing products</li> <li>- Decorative interior sheets</li> <li>- Hollow-fiber membrane modules</li> <li>- Health foods</li> <li>- Coextruded multilayer films</li> <li>- Processed SMC products</li> <li>- Coatings for building materials</li> </ul>
	<b>Liquid Crystals</b> <ul style="list-style-type: none"> <li>- LC materials</li> </ul>	<b>Solid Compounds</b> <ul style="list-style-type: none"> <li>- PPS compounds</li> <li>- High-performance compounds</li> <li>- Plastic colorants</li> <li>- High-performance optical materials</li> </ul>			





**Color & Comfort**