CORPORATE REPORT 2017

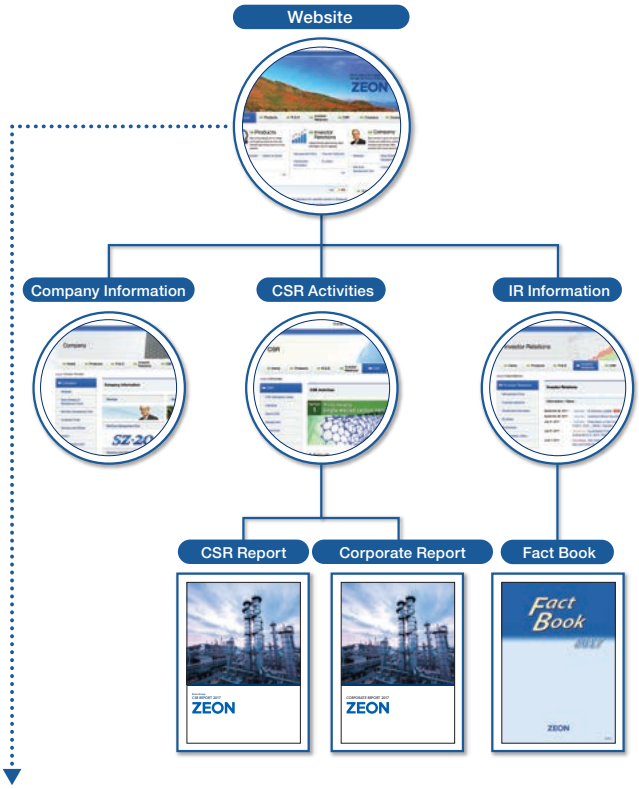
ZEON

CONTENTS

Zeon's information disclosure

Basic information on Zeon Corporation and Zeon Group is available on the Company Information section of the corporate website.
This Corporate Report (booklet) contains a wide range of information on Zeon corporate management and CSR. A CSR report (PDF) with detailed information on initiatives and site reports is available on the CSR activities section of the corporate website.
More information about Zeon's management and operations is available on the Investor Relations section of the corporate website and in the Fact Book.

Website ▶ http://www.zeon.co.jp/index_e.html



All about Zeon! website 2017 (Japanese only)

All about Zeon! is a special website featuring interviews with employees and Zeon TV commercials broadcast regionally in Japan.

Editorial policy

Zeon Corporation and Zeon Group ("Zeon") previously published a stand-alone CSR report. Since FY 2013, Zeon has published a booklet form of the CSR report renamed the Corporate Report, which includes an annual report and corporate profile providing of overview of Zeon's general business activities.

Highlights of the FY 2017 Corporate Report include an introduction to Zeon products that make contributions to society. The Corporate Report is divided into Zeon's Business and Strategy and Zeon's CSR. Zeon's Business and Strategy section describes the new SZ-20 Phase III mid-term management plan and Zeon's value creation model. Zeon's CSR reviews social issues in the supply chain and includes updated reporting on initiatives based on ISO 26000.

Reporting period

April 2016 to March 2017 (includes some information after April 2017)

Reporting scope

Zeon Corporation and Zeon Group companies inside and outside Japan. Some data covers only Zeon Corporation.

Corporate Philosophy

Zeon is contributing to the preservation of the Earth and the prosperity of the human race

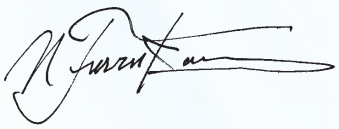
Zeon, with its name drawn from words signifying the Earth (geo) and eternity (eon), is committed to responsible stewardship of the global environment as the foundation for human prosperity through the development and application of unique, world-leading technologies.

Following our corporate philosophy, we have consistently released new products using our pioneering, inimitable technologies. Zeon's products are incorporated into customers' final products to support society through their presence all around us.

To fulfill our responsibility to society now and in the future, we are developing our business under our enterprise blueprint for 2020 plan with the mission of "Zeon makes the future today through the power of chemistry."

Our new mid-term management plan starts in FY 2017 and finishes in FY 2020. As we were embarking on this plan, our Kawasaki Plant and R&D Center were honored with a visit by His Majesty the Emperor on July 7, 2017. This visit was a welcome opportunity to reaffirm our responsibilities and enhance solidarity among Zeon employees of all ages and ranks. Taking to heart the warm words of appreciation and encouragement that we received during this Imperial visit, we at Zeon Group will work as a team to develop our business and boldly achieve our management plan so that we may continue to contribute to the development of society.

We deeply appreciate your continued support and encouragement.



Naozumi Furukawa
Chairman
Zeon Corporation

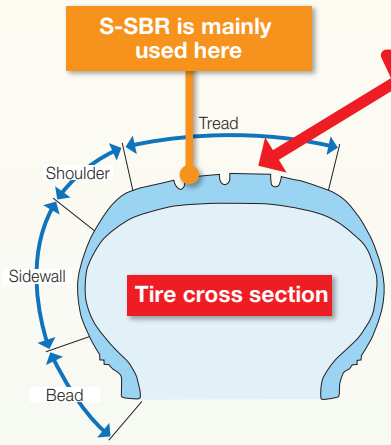
S-SBR in tire helps fight climate change

Fuel efficiency is one important element determining a vehicle's value. Tires have a significant impact on fuel efficiency. When driving on city streets, tires account for approximately 10% of a vehicle's fuel efficiency. This increases to more than 20% when driving at fixed speeds such as highway cruising speed.

Tires that meet a certain standard of performance are called **fuel-efficient tires**. Zeon's solution-polymerized styrene-butadiene rubber (S-SBR) makes significant contributions to this fuel-efficient performance.

Fuel-efficient tires typically weigh between 7 and 8 kilograms, of which approximately 10% is S-SBR. In addition to rubber, tire manufacturers use a number of materials combined with their own technologies to make vehicle tires.

The diagram shows the different parts of a tire. Zeon's S-SBR is used in the **tread** that makes contact with the road.



●**Driving condition and tire contribution to fuel efficiency**

Driving condition	Tire contribution (%) to fuel efficiency
Constant driving speed	20 – 25%
Driving on city streets	7 – 10%

Source: Tire Fair Trade Council (Japan) website (Japanese only)
http://www.tftc.gr.jp/performance/labeling

●**Tires are made from many materials**

Zeon supplies S-SBR as one of the raw material rubber

S-SBR

S-SBR is shipped in 35-kg blocks. Tire manufacturers then crush this and combine it with other materials.

Tire manufacturers
Kneading / Parts creation / Molding / Vulcanization / Inspection / Shipment

Materials supplied from materials manufacturers

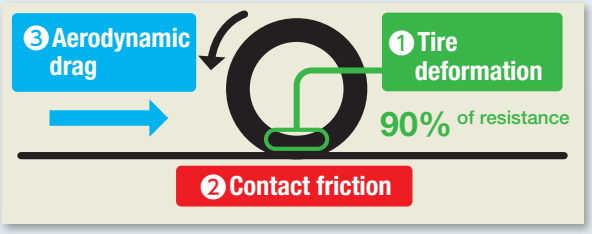
- Natural rubber
- Butadiene rubber
- Carbon black
- Silica
- Sulfur
- Compounding agents
- Fiber
- Wire

What is rolling resistance?

A vehicle's fuel efficiency is affected by its tires' rolling resistance. As the diagram on the right shows, there are three types of resistance. Because about 90% of the resistance comes from tire deformation, controlling tire deformation is key to reducing rolling resistance.

Zeon reduces tire deformation by controlling the molecular structure of S-SBR.

●**Three types of rolling resistance affecting tires during driving**



Zeon's S-SBR boasts three world-class properties

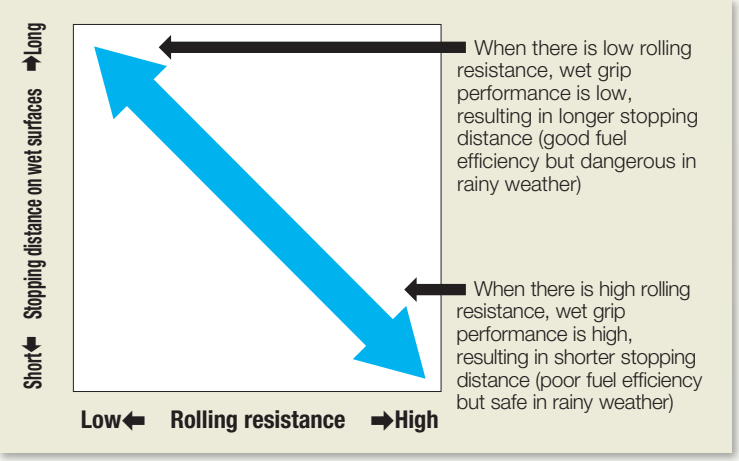
Having too little rolling resistance is dangerous, because tires will have poor wet grip performance and be slippery on wet road surfaces. Generally speaking, **rolling resistance** and **wet grip** have an inverse relationship—when one gets better, the other gets worse.

So tire manufacturers have been innovating in many ways to develop tires with low rolling resistance and high wet grip performance, including rubber composition, tire construction, and tread patterns.

Wear resistance is another important feature that tires need in order to deliver long life.

Zeon's S-SBR technology controls the molecular structure of the rubber to achieve high performance in the three aspects of **wet grip**, **rolling resistance**, and **wear resistance**.

●Relationship between rolling resistance and stopping distance on wet surfaces



1 Wet grip performance

Just the *right softness* to grip wet roads

Rubber softness when braking is regulated by controlling the ratios of styrene and butadiene, two raw materials of S-SBR, and butadiene bonding types.

2 Low rolling resistance (better fuel efficiency)

If the drag against a vehicle's motion is low, fuel consumption will also be low

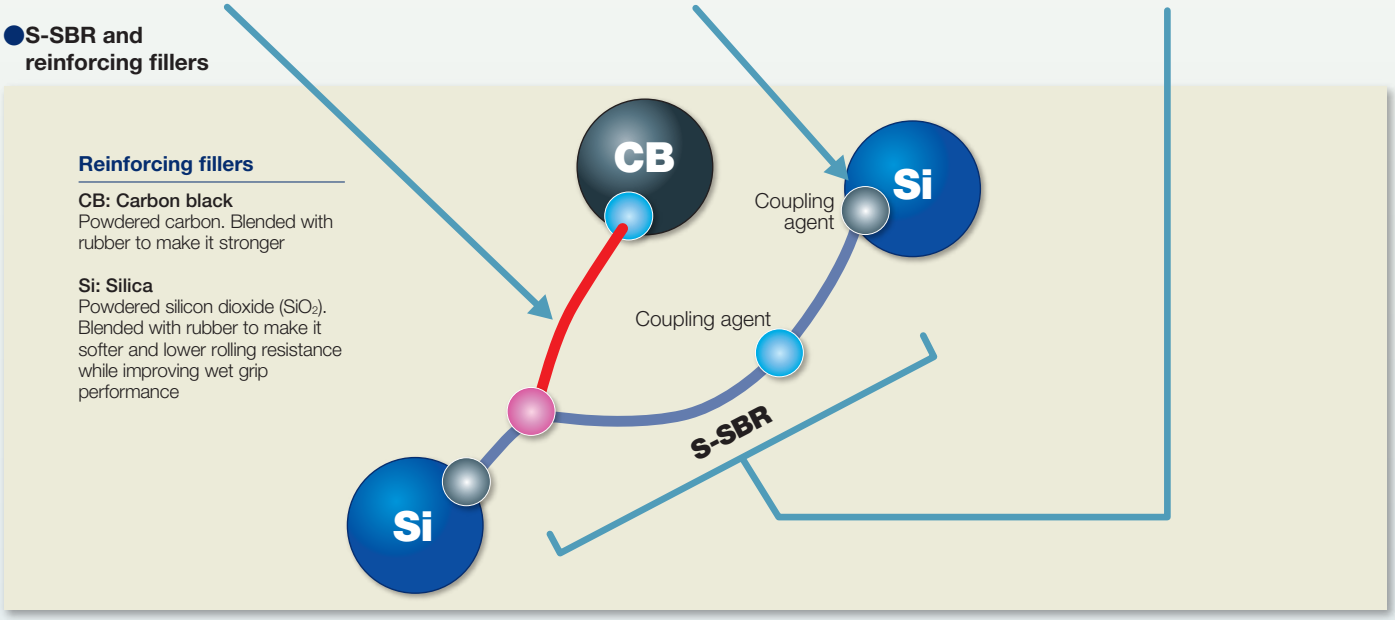
The coupling agents at the middle and the end of S-SBR molecule disperse the right amount of the reinforcing fillers (carbon black and silica).

3 Wear resistance

Tires better able to withstand friction will last longer

The size of rubber molecules primarily affects wear resistance, and S-SBR regulates rubber molecule size and branching.

●S-SBR and reinforcing fillers



Reducing vehicle CO_2 emissions with fuel-efficient tires

Comparing the lifecycle CO_2 emissions of fuel-efficient tires and standard tires from raw materials production to disposal, fuel-efficient tires reportedly have 19% lower CO_2 emissions*. Zeon is contributing to reducing overall vehicle CO_2 emissions by improving the performance of fuel-efficient tires with S-SBR.

* Tyre Life Cycle CO_2 Calculation Guidelines, Ver. 2 (Japan Automobile Tyre Manufacturers Association)

Zeon's energy materials supporting lithium-ion batteries

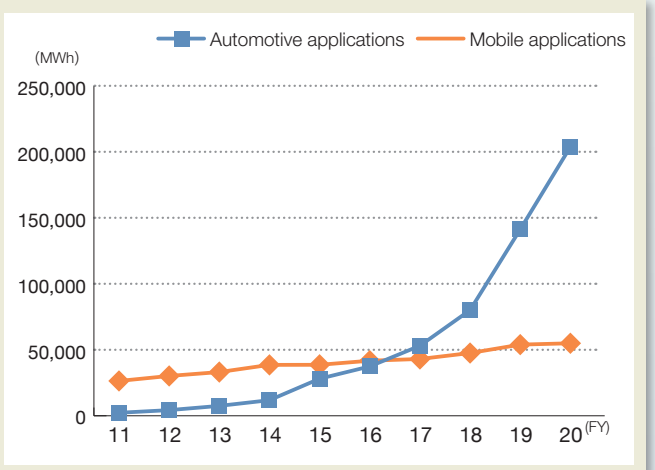
Today's smartphone batteries have greater capacity, output, and operating life than yesterday's cell phones. Lithium-ion rechargeable batteries are also used in electric and hybrid vehicles. These batteries have been adopted in vehicles because of their recognized safety performance.

In the growing lithium-ion rechargeable batteries market, we have been focusing on the potential of binders used in the batteries. Zeon's energy materials are one factor contributing to the widespread use of lithium-ion rechargeable batteries today.

Growing lithium-ion rechargeable battery market for automobiles

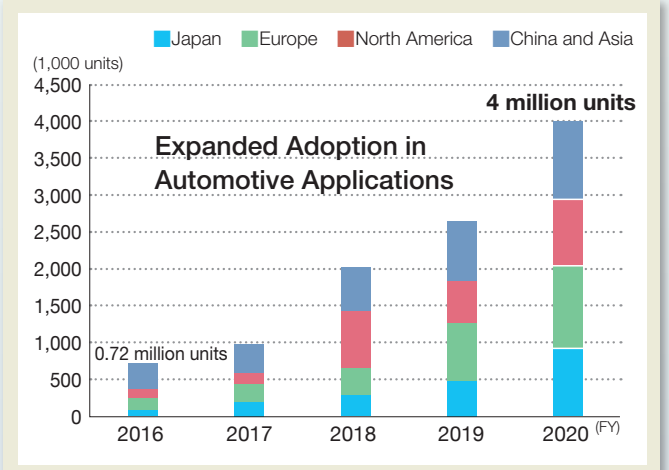
Lithium-ion rechargeable batteries were commercialized in 1991, and their market has grown from their contributions to the spread of desktop and laptop computers as well as cell phones. Lithium-ion batteries were first used in vehicles in 2010, and by 2016 the automotive battery market quickly grew to about the same size as the mobile electronics battery market. The high growth seen in the automotive lithium-ion rechargeable battery market is expected to increase further with the rising number of hybrid and electric vehicles in the market. The markets where Zeon's energy materials can make contributions are also expected to expand.

●Growth in Battery Market of the Automotive and Mobile Electronics



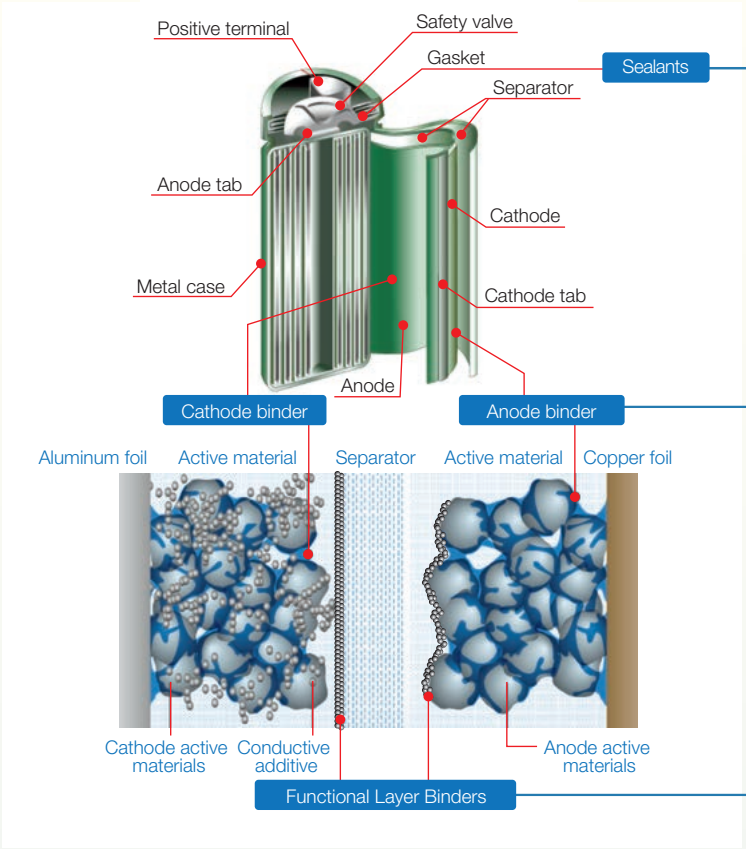
Source: B3 Report, November 15–16

●PHV & EV Sales Forecast by Automaker



Source: Zeon estimates based on B3 Report

Zeon's Energy Materials



Sealants

Compounds for coating the gasket surface of cylindrical lithium-ion batteries to increase the adhesive properties of the cylinder's exterior and cap.
Zeon's sealants offer excellent heat resistance, cold resistance, and electrolyte resistance. They help prevent battery leakage to preserve battery performance and extend operating life.
➡Contributing to longer life

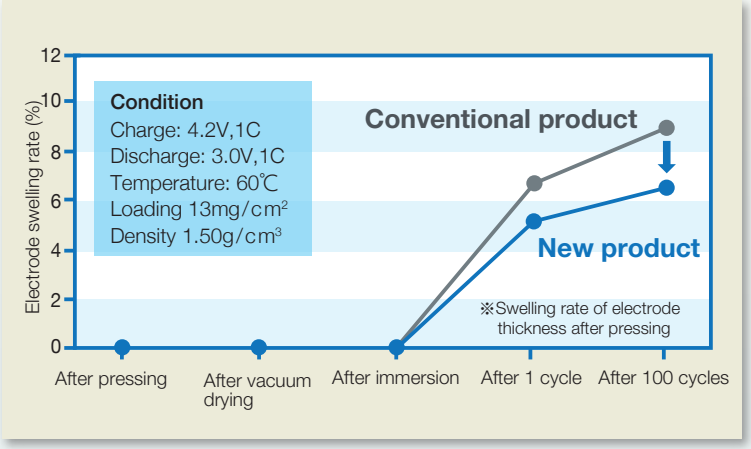
Cathode and anode binders

Lithium-ion rechargeable batteries comprise cathode materials made from metal oxide including lithium, anode materials that attract lithium ions, the electrolyte that transfers the lithium ions between the cathode and anode, and a separator that electrically separates the cathode and anode. The basic function of the cathode and anode binder is to bind the cathode and anode particulate material to the electrodes. Binders have received attention recently for their ability to control interface reactions with the active material and the electrolyte solution.
Zeon's binders create the right amount space in the active material for lithium ions to pass and are resistant to volume expansion and shrinking from battery charging and discharging.
➡Contributing to longer life
Zeon's binders not only bind, they support the chemical reactions occurring on the surface of the active materials. This enhances the reactions to increase battery output.
➡Contributing to higher output

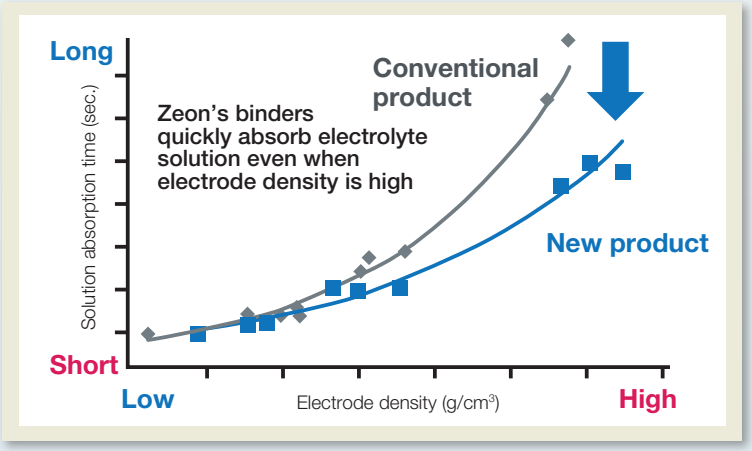
Functional Layer Binders

To meet the growing needs for safety, battery structures that separate the heat-resistant layer or coat the electrode surfaces to prevent internal short circuits have been commercialized.
Zeon started this development in 2003 and released a binder for the heat-resistant layer in 2005. We are expanding sales of this binder mainly for automotive applications. In 2013, we released a slurry for the heat-resistant layer.

❶Preventing electrode volume expansion



❷Improving electrolyte impregnation



●Preventing thermal contraction of the separator with a functional layer binder

Thermal contraction test (150℃ for 1 hour)

With binder
Resistant to contraction (1.3% contraction)

Without binder
Contracts

Zeon material and products making contributions to society

The value created by Zeon's materials and products contribute to society in many ways.
Here are just a few examples.

Global Environment

Improved performance and extended life of manufacturers' products made with Zeon's materials and components contribute to reducing environmental impacts through such ways as energy conservation, mitigating climate change, and reducing waste.

Solution-polymerized styrene-butadiene rubber (S-SBR):
Improves the performance of fuel-efficient tires and contributes to energy conservation and reduced CO_2 emissions.

Biosynthetic epichlorohydrin rubber (ECO):
The first biosynthetic rubber adopted in automotive vacuum sensing hoses. Contributes to reduced lifecycle CO_2 emissions by switching fossil fuel-derived materials to plant-derived materials.

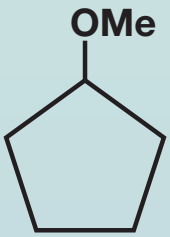
Energy materials:
Zeon's binders prevent electrode volume expansion and greatly improve cell life. They also increase the chemical reactions on the surface of the active materials to increase battery output.

Prohydrojasmon plant growth regulator:
Reduces declines in the production volume and quality of agricultural products due to the effects of climate change (Jasmomate® Ekizai agrochemical formulation).

ZEOCOAT®
Coating-type insulating and protective layer for displays:
With high transparency, low moisture absorption, and low dielectric constant, contributes to reduced environmental impacts by improving display performance and extending the life of electronics components.

ZEORORA® H
HFC solvent:
Contributes to climate change prevention as an alternative HFC solvent.

ZEORORA®
Etching gas for oxide layers:
Contributes to climate change prevention as an etching gas with low global warming potential.



Cyclopentyl methyl ether (CPME)
Hydrophobic ether solvent:
Low environmental impact since it is easily recovered after use as a solvent and little is disposed of in wastewater.

Improved Performance

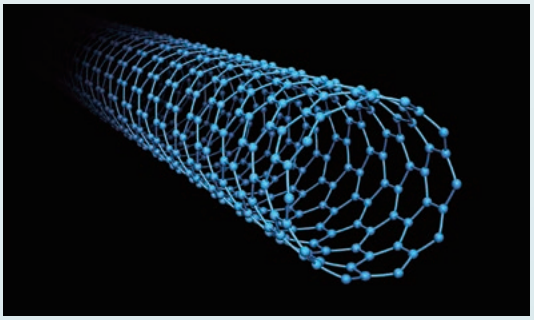
Using Zeon's materials and components can greatly improve product performance.

ZeonorFilm™ Optical film:

ZeonorFilm™ optical film contributes to improved display performance by combining ZEONOR® resin properties including transparency and low water absorption with our world-first sheet extrusion process, film stretching technology, and other film processing technologies.

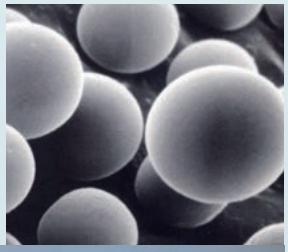
Pad-type thermal interface material (TIM):

TIM using rubber/single-walled carbon nanotube composite achieves low thermal resistance.
It increases the thermal conductivity of the heat sink and resolves the heat generation problem of servers and power devices.



ZEOGLOBULE™ Polymerized toner:

The world's first industrialized polymerized toner. Contributes to improving resolution and print speed with its uniform spherical capsule structure.



Health and Living

Zeon's materials, components, and products are useful in daily life and benefit health and well-being.

Synthetic aroma chemicals:

The raw materials are derived from fossil fuels but have the same chemical structure as natural aromas. They are used in foods, cosmetics, and other products.

Thermoplastic elastomer:

Used in elastic film for disposable diapers to achieve lighter weight and greater comfort.

Synthetic latex for gloves:

Due to concern about allergic reactions from proteins found in natural rubber, demand is shifting from natural to synthetic rubber gloves made with NBR latex and the market is expanding.

Cyclo-olefin polymers:

COP are used in prefilled medical syringes and contribute to increased safety in medical settings. With properties including light weight, high strength, transparency, high purity, and low protein absorption.

Intravascular pressure -sensing guidewires:

Zeon's guidewires help lessen patients' pain and healthcare professionals' workloads, because treatment decisions can be accurately made using sensors and a monitor.

Catheters for removal of bile duct stones:

Zeon's catheters help lessen patients' pain and healthcare professionals' workloads, with a strong reputation in treatment to remove bile duct stones.

Company Profile

Name: **Zeon Corporation**

Established: April 12, 1950

Capital: 24.211 billion yen (as of March 31, 2017)

Market capitalization: 172.5 billion yen (as of March 31, 2017)

Total number of shares outstanding: 237,075,556 shares

Employees: 3,090 (consolidated)
1,590 (non-consolidated) (as of March 31, 2017)

Business segments: Elastomer Business, Specialty Materials Business, other businesses (➡P13)

Head Office: Shin Marunouchi Center Building, 1-6-2 Marunouchi, Chiyoda-ku, Tokyo 100-8246, Japan

Plants: Takaoka Plant, Kawasaki Plant, Tokuyama Plant, Mizushima Plant

Research laboratories: R&D Center (Kawasaki)

Offices: Osaka Office, Nagoya Office

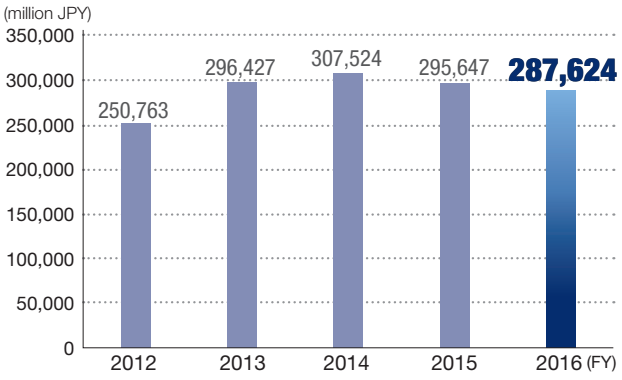
Subsidiaries and affiliates in Japan (➡P17):

Tokyo Zairyo Co., Ltd., Zeon Kasei Co., Ltd.,
Zeon North Co., Ltd., Zeon Yamaguchi Co., Ltd.,
Zeon F&B Co., Ltd., Zeon Chemicals Yonezawa Co., Ltd.,
RIMTEC Corporation, Zeon RIM Co., Ltd.,
Zeon Medical Inc., Optes Inc., TFC Inc.,
Zeon Polymix Inc., Tohpe Corporation,
Zeon Nano Technology Co., Ltd., ZS Elastomers Co., Ltd.,
Okayama Butadiene Co., Ltd., ZIS Information Technology Co., Ltd.

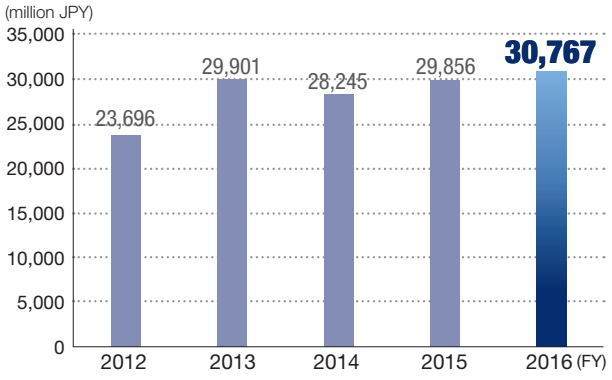
Subsidiaries and affiliates outside Japan (➡P13):

【Europe】Zeon Europe GmbH, Telene S.A.S.
【USA】Zeon Chemicals L.P., Tokyo Zairyo (USA) Inc.
【Mexico】Zeon Kasei Mexico S.A. de C.V.,
Tokyo Zairyo México S.A. de C.V.
【Brazil】Zeon do Brasil Ltda
【China】Zeon (Shanghai) Co., Ltd., Shanghai Zeon Co., Ltd.,
Zeon Trading (Shanghai) Co., Ltd.,
Zeon Polymix (Guangzhou) Co., Ltd.,
Suzhou Rui Hong Electronic Chemicals Co., Ltd.,
Zeon Kasei (Changshu) Co., Ltd., Zeon Medical (Guangzhou) Inc.,
Takehara Zeon (Shanghai) Co., Ltd., Tokyo Zairyo (Shanghai) Co., Ltd.,
Tokyo Zairyo (Tianjin) Co., Ltd., Tokyo Zairyo (Guangzhou) Co., Ltd.
【South Korea】Zeon Korea Co., Ltd., Zeon Shinhwa (Zeshin) Inc.
【Taiwan】Zeon CSC Corporation
【Singapore】Zeon Chemicals Singapore Pte. Ltd.,
Zeon Asia Pte. Ltd., Tokyo Zairyo (Singapore) Pte. Ltd.
【Thailand】Zeon Chemicals (Thailand) Co., Ltd.,
Zeon Advanced Polymix Co., Ltd.,
Tokyo Zairyo (Thailand) Co., Ltd.
【Vietnam】Zeon Manufacturing Vietnam Co., Ltd.,
Zeon Research Vietnam Co., Ltd.,
Tokyo Zairyo (Vietnam) LLC.
【Malaysia】Zeon Asia Malaysia Sdn. Bhd.
【India】Zeon India Private Limited, Tokyo Zairyo (India) Pvt. Ltd.
【Indonesia】PT. Tokyo Zairyo Indonesia

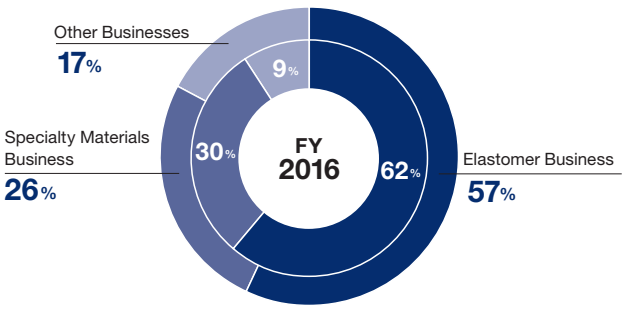
Consolidated net sales



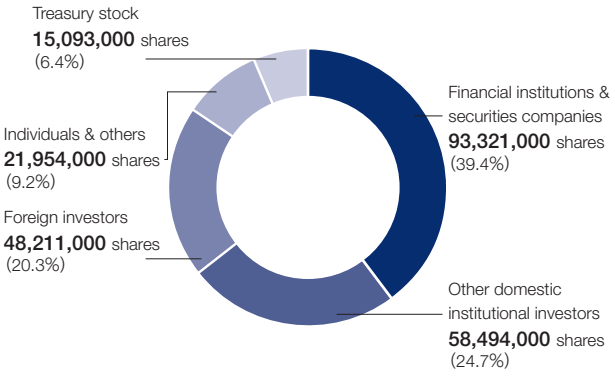
Consolidated operating income



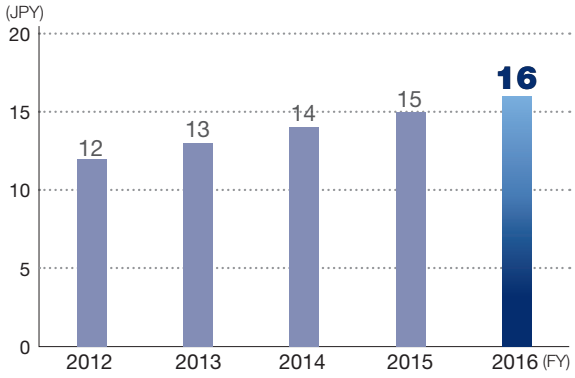
Segment net sales (outer circle) and operating income (inner circle)



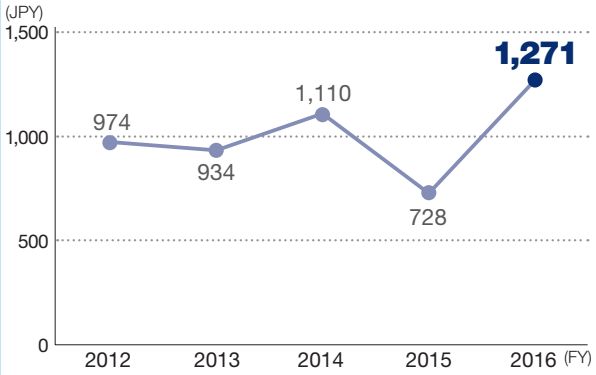
Shareholder information (as of March 31, 2017)



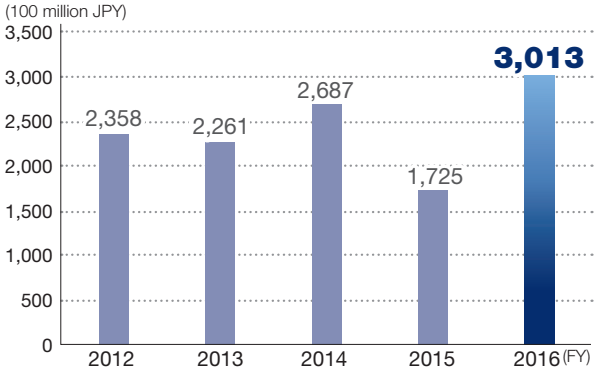
Dividends



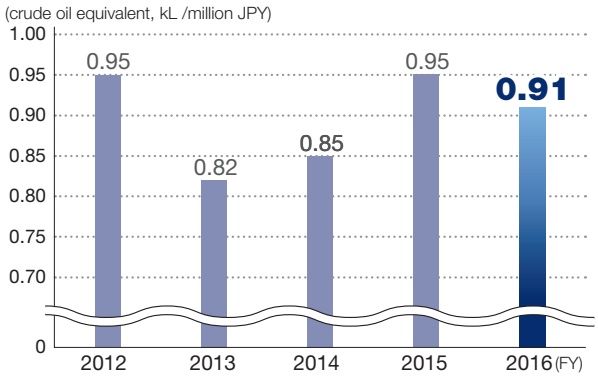
Share price (closing price on March 31)



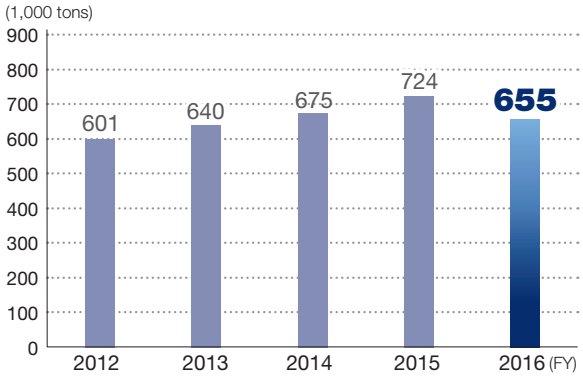
Market capitalization (as of March 31)



Energy use per net sales (Zeon Group inside and outside Japan)



CO_2 emissions (including Zeon Group inside and outside Japan)



Zeon Group History

Starting from PVC and synthetic rubber production

Zeon Corporation was founded as a PVC manufacturer in 1950, established with capital from three Furukawa group companies—Furukawa Electric, Yokohama Rubber, and Nippon Light Metal. Zeon acquired its PVC manufacturing technologies from U.S.-based B.F. Goodrich Chemical Company, which at the time was the global leader in the industry. Zeon continued developing the PVC business from its founding until full withdrawal in 2000.

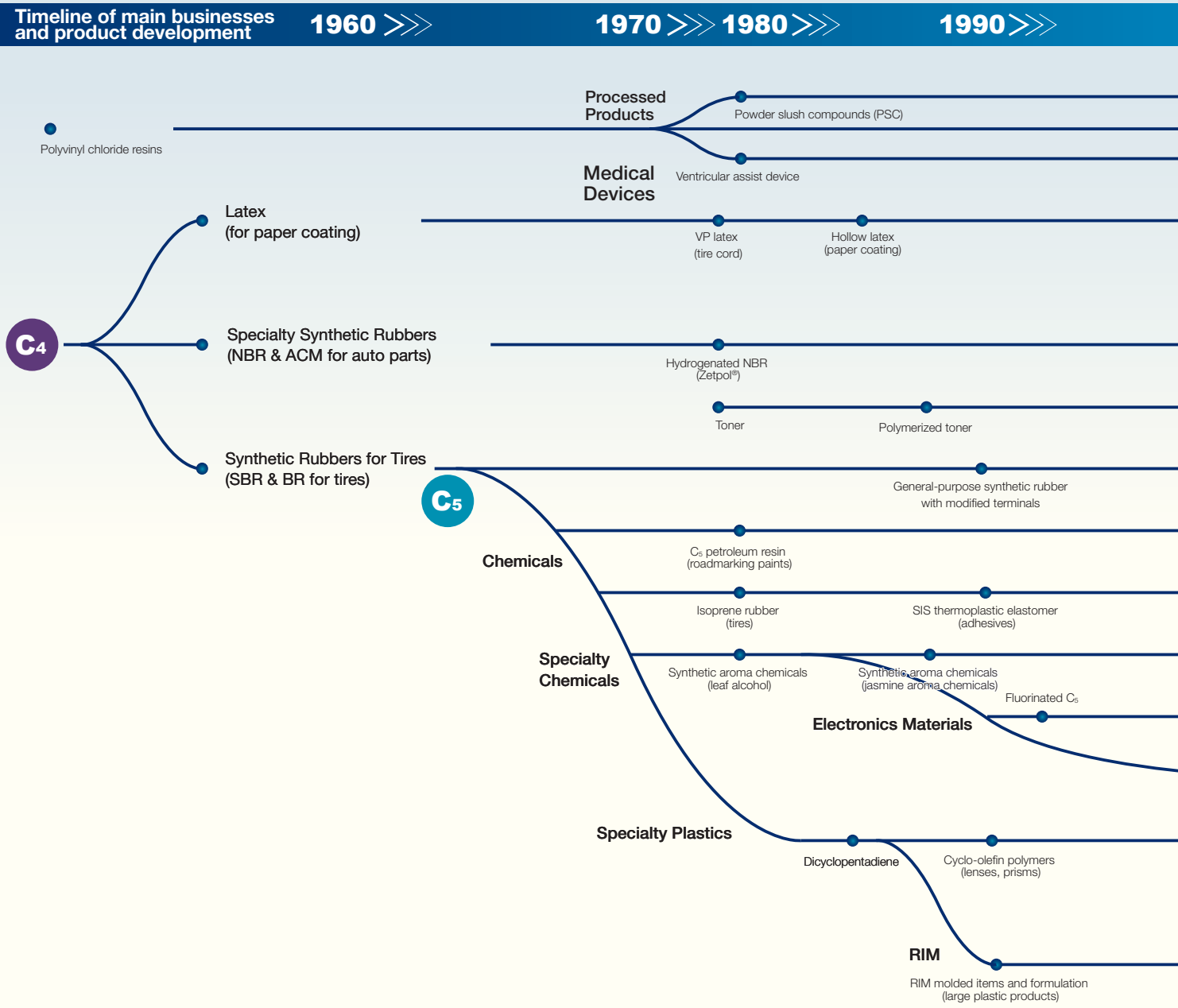
In 1959, Zeon acquired technologies from B.F. Goodrich Chemical Company to operate a special synthetic rubber (NBR) plant. This was Japan's first domestic synthetic rubber plant. Following this, Zeon embarked on the production of general-purpose synthetic rubber (SBR). Zeon thus established its synthetic rubber business for tires and engine components, which it continues to manufacture today.

World-leading C_4 and C_5 technologies with GPB and GPI processes

In the petrochemical industry, which uses crude oil as a raw material, technological capabilities are a key element impacting company competitiveness. Zeon developed the GPB process in 1965 to efficiently extract high-grade butadiene, which is the raw material used in PVC and synthetic rubber production, from C_4 fractions. In 1971, Zeon developed the GPI process to efficiently extract isoprene, the raw material in isoprene rubber, and other useful components, from C_5 fractions.

Zeon licenses its proprietary GPB process technology in countries around the world. This greatly contributes to Zeon's competitive edge and promotes the Zeon brand globally.

Timeline of main businesses and product development

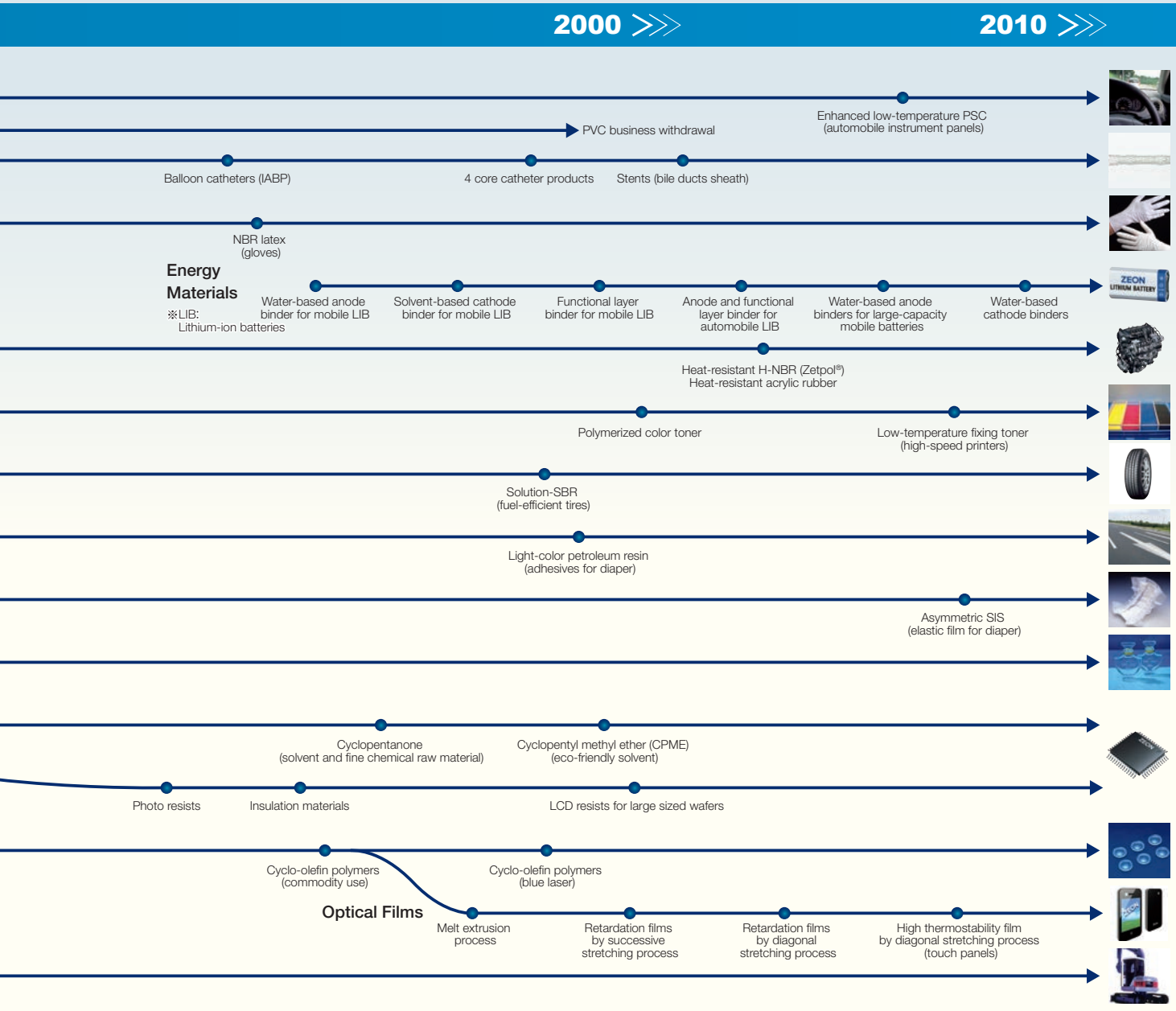


Developing comprehensive uses for C_5 fractions

Isoprene rubber is a useful material with the same chemical stability as natural rubber. Many byproducts are derived from the process of extracting isoprene feedstock from C_5 fractions. One advantage of the GPI process is the ability to extract these byproducts at a high degree of purity. Zeon has focused on ways to effectively use these substances. As a result, Zeon subsequently grew its business to include petroleum resins and thermoplastic elastomer SIS in the 1980s, synthetic aroma chemicals and RIM molded products in the 1990s, and cyclo-olefin polymers since the 2000s. These businesses now enjoy a large share of the global market. The technologies gained during this development process are being used in other areas in addition to C_5 fractions.

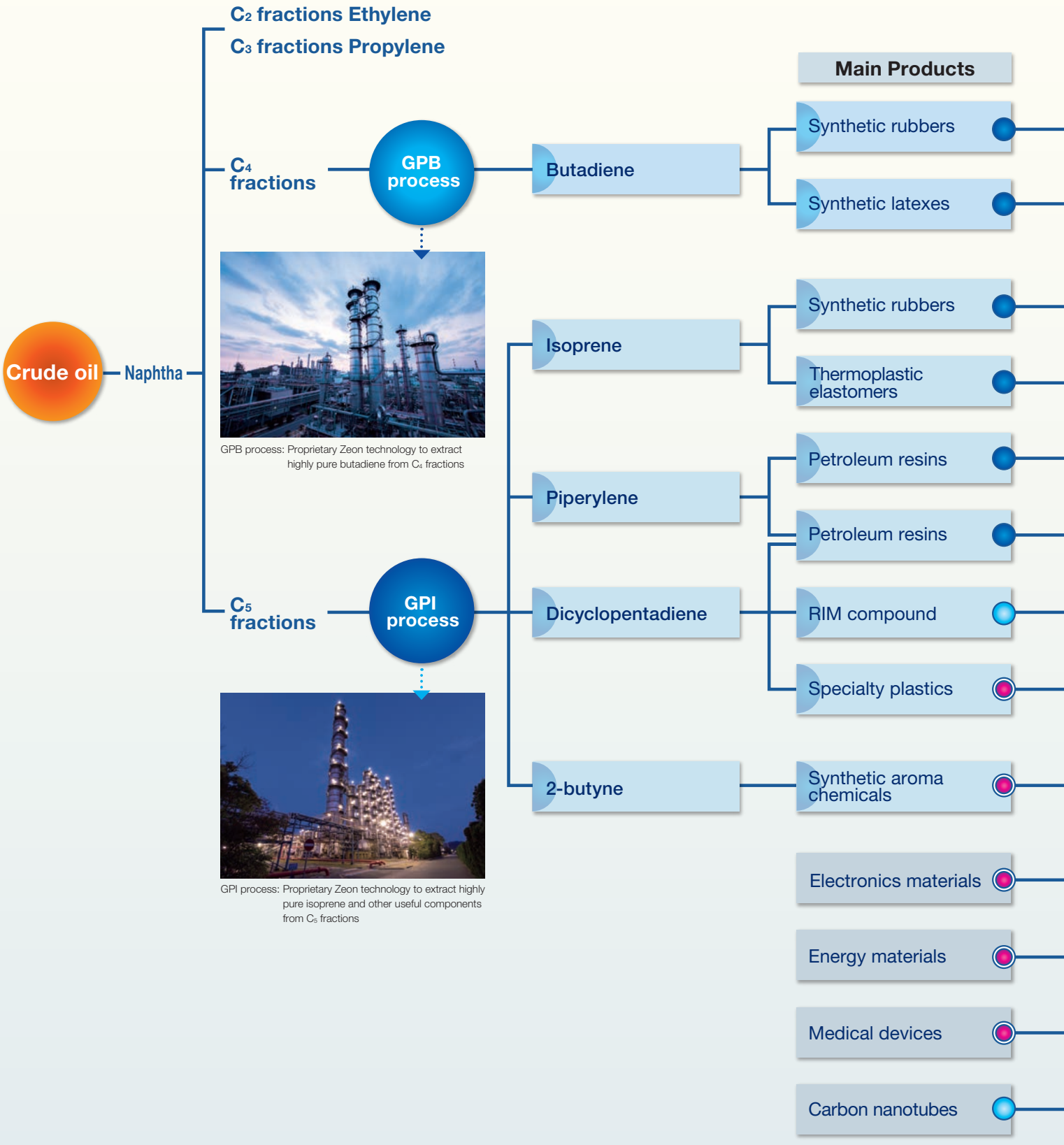
Developing more advanced materials and establishing leading manufacturing technologies

In recent years, needs have grown for products with advanced functions that offer higher energy efficiency in response to environmental problems, and similar expectations are rising for chemical materials. To meet these expectations, Zeon developed Zetpol® hydrogenated nitrile rubber, which provides high functionality at a competitive cost and is used in automotive engine components and other applications with harsh working conditions. In addition, cyclo-olefin polymers, developed from comprehensive use of C_5 fractions, are high-performance materials used in optical films, such as for LCD panels and lenses, and in electrical insulation.



Business Overview

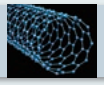
Zeon's main products are created from raw materials such as butadiene and isoprene, which are extracted from the C_4 and C_5 fractions of naphtha using proprietary Zeon technologies. Business segments are divided into the Elastomer Business, Specialty Materials Business, and other businesses.



GPB process: Proprietary Zeon technology to extract highly pure butadiene from C_4 fractions

GPI process: Proprietary Zeon technology to extract highly pure isoprene and other useful components from C_5 fractions

Applications

- Automobile components 
- Tires 
- Gloves for medical use and food processing 
- Cosmetic puffs 
- Automobile components 
- Tires 
- Adhesives 
- Adhesives 
- Traffic paints 
- Paints/ coatings 
- Inks
- Housing equipment and components 
- Large-size molding 
- Lenses 
- Optical films 
- Medical containers
- Fragrances 
- Food additives
- Electronics materials 
- Toner 
- Binders for lithium-ion rechargeable batteries 
- Medical catheters 
- Single-walled carbon nanotubes, composite materials 

Business Segments

Elastomer Business (Elastomer Business)

Elastomer Business

In 1959, Zeon became the first company in Japan to mass-produce synthetic rubbers. Even today, the Elastomer Business is the core business, providing 60% of total net sales and operating income.

Main products

Synthetic rubbers, synthetic latexes, chemical products (thermoplastic elastomers, petroleum resins)

Other

Housing equipment and components; Large-size molding

Specialty Materials Business (Specialty Materials Business)

Specialty Materials Business

Specialty materials refer to materials and components with high added value that have a macromolecular design and are made with processing technology. The three main business areas of the Specialty Materials Business are IT components, energy materials, and medical devices.

Main products

High-performance resins and materials, electronics materials, toners, battery materials, medical devices

Other

Other Businesses

Engineering, packaging materials, building materials, deodorants, RIM formulation, single-walled carbon nanotubes, paints/coatings, trading, etc.

Social value created from C_4 and C_5

P7

Zeon Group Locations
GLOBAL as of September 30, 2017

Europe

Zeon Europe GmbH
Hansaallee 249, 40549 Dusseldorf, Germany
TEL: +49-211-52670 FAX: +49-211-5267160
• Sales, export, and import of synthetic rubbers and resins

Zeon Europe GmbH - Branch in France
22, rue Guynemer 78600 Maisons Laffitte, France
TEL: +33-1-39-12-75-20 FAX: +33-1-39-12-75-26

Zeon Europe GmbH - Branch in Spain
C/Beethoven, 15, 4º08021 Barcelona, Spain
TEL: +34-93-183-87-08 FAX: +34-93-183-87-58

Zeon Europe GmbH - Branch in Italy
Via Mauro Macchi, 27, 20124 Milano, Italia
TEL: +39-02-36680101 FAX: +39-02-36680124

Telene S.A.S.
2, rue Marie Curie - 59910 Bondues, France
TEL: +33-3-20-69-57-10 FAX: +33-3-20-69-57-11
• Development and sales of Telene® DCP-RIM resin

China

Zeon (Shanghai) Co., Ltd.
Room 1502, Hongwell International Plaza, No. 1600 Zhongshan West Road, Xuhui District, Shanghai, 200235, China
TEL: +86-21-6167-5776 FAX: +86-21-6040-7258
• Provide assistance and exercise control over the Zeon Group companies in China with regard to such functions as accounting, finance, personnel management, legal, etc.

Shanghai Zeon Co., Ltd.
No. 380 Shennan Road, Xinzhuang Industry District, Minhang, Shanghai, 201108, China
TEL: +86-21-6489-6160 FAX: +86-21-6442-0569
(Push "0" after announcements)
• Manufacture and sales of rubber compounds (CM)

Zeon Trading (Shanghai) Co., Ltd.
Room 1501, Hongwell International Plaza, No. 1600 Zhongshan West Road, Xuhui District, Shanghai, 200235, China
TEL: +86-21-6040-7255 FAX: +86-21-6040-7258
• Purchase and sales of synthetic rubbers, chemical products, and other products (including international trade)

Zeon Polymix (Guangzhou) Co., Ltd.
Jing Quan 1st Road, Yong He Economic Zone, Guangzhou, 511356, China
TEL: +86-20-3222-1171 FAX: +86-20-3222-1820
• Manufacture and sales of rubber compounds (CM)

Suzhou Rui Hong Electronic Chemicals Co., Ltd.
No. 501, Minfeng Road, Economic Development Zone, Wuzhong District, Suzuhou City, Jiangsu, 215128, China
TEL: +86-512-6921-7666 FAX: +86-512-6921-7555
• Manufacture and sales of photo resists

Zeon Kasei (Changshu) Co., Ltd.
Huangpujiang Road 96, Dongnankaifa District, Changshu City, Jiangsu Province, 215500, China
TEL: +86-512-5235-7000 FAX: +86-512-5235-7308
• Manufacture and sales of powder slush compounds

Zeon Medical (Guangzhou) Inc.
Room 1706A, Goldlion Digital Network Center, No. 138 Ti Yu Dong Road, Tianhe District, Guangzhou, Guangdong, 510620, China
TEL: +86-20-2283-6788 FAX: +86-20-2283-6789
• Sales, export, and import of medical devices (cardiovascular and endoscopic accessory, etc.)

Takehara Zeon (Shanghai) Co., Ltd.
No. 380 Shennan Road, Xinzhuang Industrial Zone, Minhang District, Shanghai, 201108, China
• Manufacture and sales of silicon rubber compounds (CM)

India

Zeon India Private Limited
Time Tower, Unit No.507, Sector-28, M.G Road, Gurgaon-122002, Haryana, India
TEL: +91-124-4229461 FAX: +91-124-4229462
• Import, sales, and marketing of synthetic rubbers and other Zeon products

Tokyo Zairyo (India) Pvt, Ltd.
Time Tower, Unit No.507, 5th floor, Sector-28, M.G Road, Gurgaon-122002, Haryana, India
TEL: +91-124-424-9011 FAX: +91-124-424-9005
• Purchase and sales of synthetic rubbers, chemical products, and other products (including international trade)

Thailand

Zeon Chemicals (Thailand) Co., Ltd.
3 Soi G-14, Pakorn-Songkhrorad Road, Tambol Huaypong, Amphur Muangrayong, Rayong 21150, Thailand
TEL: +66-3-868-5973~5 FAX: +66-3-868-5972
• Manufacture and sales of petroleum resins

Zeon Advanced Polymix Co., Ltd.
591 UBCII BLDG, Office No.2206, 22thFL, Sukhumvit 33rd, Klongton Nua, Wattana, Bangkok 10110, Thailand
TEL: +66-2-261-0175 FAX: +66-2-261-0172
• Manufacture and sales of rubber compounds (CM)

Tokyo Zairyo (Thailand) Co., Ltd.
29th Floor Room 2903, Empire Tower 1 South Sathorn Rd., Yannawa, Sathorn, Bangkok 10120, Thailand
TEL: +66-2-670-0285 FAX: +66-2-670-0283
• Purchase and sales of synthetic rubbers, chemical products, and other products (including international trade)

Vietnam

Zeon Manufacturing Vietnam Co., Ltd.
No.109, Road No.10, VSIP Haiphong Township, Industrial and Service Park, Dinh Vu-Cat Hai Economic Zone, Thuy Nguyen District, Haiphong City, Vietnam
TEL: +84-225-3797-027 FAX: +84-225-3797-028
• Manufacture and sales of packing containers

Zeon Research Vietnam Co., Ltd.
6th Floor, Building 85 Nguyen Du Str., Hai Ba Trung District, Hanoi, Vietnam 100000
TEL: +84-4-3632-0557 FAX: +84-4-3632-0557
• Design simulation of optical materials and molded products, and market research for Zeon products in Southeast Asia

Tokyo Zairyo (Vietnam) LLC.
4th Floor, Building 85 Nguyen Du Str., Hai Ba Trung District, Hanoi, Vietnam 100000
TEL: +84-4-3941-3825 FAX: +84-4-3941-3826
• Purchase and sales of synthetic rubbers, chemical products, and other products (including international trade)

Malaysia

Zeon Asia Malaysia Sdn. Bhd.
Unit 208, Block B, Phileo Damansara II, No.15, Jalan16/11, Off Jalan Damansara, 46350 Petaling Jaya, Selangor, Malaysia
TEL: +603-7956-7069 FAX: +603-7957-1758
• Sales of synthetic latexes

Singapore

Zeon Chemicals Singapore Pte. Ltd.
100 Banyan Drive, Jurong Island, Singapore 627571
TEL: +65-6933-4400 FAX: +65-6933-4413
• Manufacture and sales of synthetic rubbers

Zeon Asia Pte. Ltd.
331 North Bridge Road, #20-01/02, Odeon Towers, Singapore 188720
TEL: +65-6332-2338 FAX: +65-6332-2339
• Sales, export, and import of synthetic rubbers, synthetic latex, and petroleum resins

Tokyo Zairyo (Singapore) Pte. Ltd.
331 North Bridge Road, #20-01/02, Odeon Towers, Singapore 188720
TEL: +65-6337-5053 FAX: +65-6337-4557
• Purchase and sales of synthetic rubbers, chemical products, and other products (including international trade)

We are continuing to globalize our business operations, having first turned our attention to global markets in the 1970s. We are setting up sales networks in major markets around the world and establishing a production system for rubber and resin products. In addition, we have R&D facilities in the USA and Europe capable of quickly meeting local needs. We are also establishing R&D and sales locations in China, a market that is growing rapidly. We are aiming to be a company that, through our local production systems, builds close ties with local communities and contributes to the global society.

Tokyo Zairyo (Shanghai) Co., Ltd.
Room 1503, Hongwell International Plaza, West Zhongshan Road 1600, Xuhui District, Shanghai, 200235, China
TEL: +86-21-6119-9400 FAX: +86-21-6119-9401
• Purchase and sales of synthetic rubbers, chemical products, and other products (including international trade)

Tokyo Zairyo (Tianjin) Co., Ltd.
Room 1805, The Exchange Tower 1, 189 Nanjing Road, Heping District, Tianjin, 300051, China
TEL: +86-22-23021268 FAX: +86-22-23021278
• Purchase and sales of synthetic rubbers, chemical products, and other products (including international trade)

Tokyo Zairyo (Guangzhou) Co., Ltd.
Room 1208, Goldlion Digital Network Center, No. 138 Ti yu Dong Road, Tianhe District, Guangzhou, Guangdong, 510620, China
TEL: +86-20-3878-0671 FAX: +86-20-3878-1336
• Purchase and sales of synthetic rubbers, chemical products, and other products (including international trade)

USA

Zeon Chemicals L.P.
4111 Bells Lane, Louisville, Kentucky 40211, U.S.A.
TEL: +1-800-735-3388 FAX: +1-502-775-2055
TEL: +1-502-775-2000
• Manufacture and sales of synthetic rubbers

Zeon Chemicals L.P. - West Coast Office
5 Centerpointe Drive 4th Floor Suite 401 Lake Oswego, OR, 97035, U.S.A.
TEL: +1-971-204-0245 FAX: +1-971-204-0240

Zeon Chemicals L.P. - R&D Center
4111 Bells Lane, Louisville, Kentucky 40211, U.S.A.
TEL: +1-502-775-7765 FAX: +1-502-775-7783

Zeon Chemicals L.P. - Kentucky Plant
4100 Bells Lane, Louisville, Kentucky 40211, U.S.A.
TEL: +1-502-775-7600 FAX: +1-502-775-7614

Zeon Chemicals L.P. - Mississippi Plant
1301 West Seventh Street, Hattiesburg, Mississippi 39401, U.S.A.
TEL: +1-601-583-6020 FAX: +1-601-583-6032

Zeon Chemicals L.P. - Texas Plant
11235 Choate Road, Pasadena, Texas 77507, U.S.A.
TEL: +1-281-474-9693 FAX: +1-281-474-0966

Tokyo Zairyo (U.S.A.) Inc.
50 Main Street, White Plains, New York 10606, U.S.A.
TEL: +1-914-285-9070 FAX: +1-914-285-9072
• Purchase and sales of synthetic rubbers, chemical products, and other products (including international trade)

Indonesia

PT. Tokyo Zairyo Indonesia
Gedung MidPlaza 2, Lantai 12, Jl. Jend. Sudirman Kav. 10-11,Jakarta 10220
TEL: +62-21-574-6454 FAX: +62-21-573-5661
• Purchase and sales of synthetic rubbers, chemical products, and other products (including international trade)

South Korea

Zeon Korea Co., Ltd.
No.403, 4Fl., 36, Teheran-ro 87-gil, Gangnam-gu, Seoul, 06164, Korea (City Air Tower, Samseong-dong)
TEL: +82-2-539-8565 FAX: +82-2-538-5190
• Sales and import of optical materials, imaging and electronics materials, synthetic resins, and synthetic rubbers, etc.

Zeon Shinhwa (Zeshin) Inc.
No.502 CALT B/D (City Airport) 22, Teheran-ro 87-gil, Gangnam-gu, Seoul, 06164, Korea
TEL: +82-2-761-7030 FAX: +82-2-786-7221
• Sales of imaging and electronics materials

Taiwan

Zeon CSC Corporation
3rd Fl. 266, Sec. 1, Wen Hwa 2 Road, Linkou District, New Taipei City 24448, Taiwan, R.O.C.
TEL: +886-2-2609-2156 FAX: +886-2-2600-6413
• Sales of optical materials

Mexico

Zeon Kasei Mexico S.A. de C.V.
Avenida Santiago Sur 100, Los Jassos, San Luis Potosi, San Luis Potosi, MEXICO, C.P.78420
TEL: +52-1-444-478-5400
• Manufacture and sales of resin compounds for powder slush

Tokyo Zairyo México S.A. de C.V.
Boulevard Bernardo Quintana 7001 Torre II Suite 807 Colonia Centro Sur, C.P. 76090 Querétaro; Querétaro, México
TEL: +52-442-229-3242 FAX: +52-442-229-3244
• Purchase and sales of synthetic rubbers, chemical products, and other products (including international trade)

Brazil

Zeon do Brasil Ltda
Rua Arandu, 57/cj 23, Sao Paulo-SP, Brazil
TEL: +55-11-5501-2120 FAX: +55-11-5501-2122
• Sales of synthetic rubbers and resins, etc.

Zeon Group Locations

Japan as of September 30, 2017

1

Zeon Corporation – Head Office
Shin Marunouchi Center Building, 1-6-2 Marunouchi, Chiyoda-ku, Tokyo 100-8246, Japan
TEL: +81-3-3216-1772 FAX: +81-3-3216-0501

Zeon Kasei Co., Ltd.
Shin Marunouchi Center Building, 1-6-2 Marunouchi, Chiyoda-ku, Tokyo 100-0005, Japan*same as follows
TEL: +81-3-5208-5111 FAX: +81-3-5208-5290
• Manufacture and sales of powder slush compounds (PSC), functional films, containers and other transport materials, packaging materials, construction materials, and deodorants.

Zeon F&B Co., Ltd.
TEL: +81-3-3216-1410 FAX: +81-3-3216-1421
• Agency business for life and non-life insurance; loan and factoring business to each group company

RIMTEC Corporation
TEL: +81-3-5220-8581 FAX: +81-3-5220-8584
Plants, R&D Center: Mizushima
• Sales of formulation liquid for Reaction Injection Molding (RIM)

Zeon Nano Technology Co., Ltd.
TEL: +81-3-3216-1766 FAX: +81-3-3216-1767
• Processing and sales of Carbon Nanotubes and related products

Zeon Medical Inc.
TEL: +81-3-3216-1265 FAX: +81-3-3216-1269
Plant: Takaoka
• Manufacturing and sale of medical devices

Tokyo Zairyo Co., Ltd.
TEL: +81-3-5219-2171 FAX: +81-3-5219-2201
• Trading

ZS Elastomer Co., Ltd.
TEL: +81-3-3216-0620 FAX: +81-3-3216-0629
• Sales and R&D of S-SBR

Okayama Butadiene Co., Ltd.
Sen-i Kaikan 2F, 3-1-11 Nihonbashi-Honcho, Chuo-ku, Tokyo 103-0023, Japan
TEL: +81-3-3278-0721 FAX: +81-3-3278-0722
• Manufacturing of butadiene monomer

ZIS Information Technology Co., Ltd.
Shin Marunouchi Center Building, 1-6-2 Marunouchi, Chiyoda-ku, Tokyo 100-0005, Japan
TEL: +81-3-3216-6500 FAX: +81-3-3216-6534
• Consulting about data processing systems; sales and maintenance of computer and office automation equipment

2

Zeon Corporation – Kawasaki Plant
1-2-1 Yako, Kawasaki-ku, Kawasaki-ku, Kanagawa 210-9507, Japan
TEL: +81-44-276-3700 (direct)
FAX: +81-44-276-3720

Zeon Corporation – R&D Center
TEL: +81-44-276-3721
FAX: +81-44-276-3720

3

Zeon Corporation – Takaoka Plant
630 Ogino, Takaoka-shi, Toyama 933-8516, Japan
TEL: +81-766-21-0252 (direct)
FAX: +81-766-21-8201

Zeon North Co., Ltd.
351 Ejiri, Takaoka-shi, Toyama 933-0062, Japan
TEL: +81-766-25-1111 FAX: +81-766-25-4059
• Contracting, design, construction, and management for various facilities; sales of industrial materials and equipment, purchase and sale of petrochemical products; testifying environmental measurements, measurement working environment; conducting various analyses

Optes Inc.
422-1 Futagamishin, Takaoka-shi, Toyama 933-0981, Japan
TEL: +81-766-32-1590 FAX: +81-766-32-1591
Plants: Toyama, Fukui, Sano
• Manufacturing of optical film and optical parts; design and manufacturing of mold

4

Zeon Corporation – Tokuyama Plant
2-1 Nachi-cho, Shunan-shi, Yamaguchi 745-0023, Japan
TEL: +81-834-21-8501 (direct)
FAX: +81-834-21-8793

Zeon Yamaguchi Co., Ltd.
2-1 Nachi-cho, Shunan-shi, Yamaguchi 745-0023, Japan
TEL: +81-834-21-8482 FAX: +81-834-21-8663
• Purchase and sale of civil engineering materials, packing materials, and various facilities; design and construction, contracting for various plants; environment analysis

5

Zeon Corporation – Mizushima Plant
2767-1 Kojima Shionasu Aza Niihama, Kurashiki-shi, Okayama 711-8511, Japan
TEL: +81-86-475-0021 FAX: +81-86-475-1169

Zeon RIM Co., Ltd.
2767-22 Kojima Shionasu Aza Niihama, Kurashiki-shi, Okayama 711-0934, Japan
TEL: +81-86-475-0621 FAX: +81-86-475-0620
• Manufacturing, processing and sale of plastic molding products

6

Zeon Corporation – Osaka Office
Furukawa Osaka Bldg. West 4F, 2-1-9 Dojimahama, Kita-ku, Osaka-shi, Osaka 530-0004 Japan
TEL: +81-6-4797-8220 FAX: +81-6-4797-8225

Tohpe Corporation
1-5-11 Chikkoshinmachi, Nishi-ku, Sakai-shi, Osaka 592-8331, Japan
TEL: +81-72-243-6411 FAX: +81-72-243-6415
Plants: Ibaraki, Mie, Kurashiki
• Manufacturing and sale of paints and chemical products

7

Zeon Corporation – Nagoya Office
Ichigo Fushimi Bldg. 7F, 1-18-24 Nishiki, Naka-ku, Nagoya-shi, Aichi 460-0003 Japan
TEL: +81-52-209-9145 FAX: +81-52-209-9147

8

Zeon Polymix Inc.
1-11-1 Ishizue, Otsu-shi, Shiga 520-2272, Japan
TEL: +81-77-546-1223 FAX: +81-77-546-0338
Plants: Otsu
• Manufacturing compound of synthetic rubber (carbon masterbatches)

9

Zeon Chemicals Yonezawa Co., Ltd.
3-446-13 Hachimanpara, Yonezawa-shi, Yamagata 992-1128, Japan
TEL: +81-238-29-0055 FAX: +81-238-29-0053
• Manufacturing, processing and sale of aromatic chemicals, the intermediate of medicine and agricultural chemicals and RIM formulation liquid

10

Zeon Kasei Co., Ltd. – Ibaraki Plant
1175 Kamiizushima, Bando-shi, Ibaraki 306-0654, Japan
TEL: +81-297-34-2111 FAX: +81-297-34-2316
• Manufacture of processed plastic products (PVC compounds), powder rubbers, resin sheets, and low-pollution resin sheet molded products

11

River Xemex Co., Ltd.
2-11-17 Osachigosho, Okaya-shi, Nagano 394-0082, Japan
TEL: +81-266-21-2131 FAX: +81-266-21-1550
• Manufacture of medical devices

12

TFC Inc.
34-23-2 Azono, Tsuruga-shi, Fukui 914-0141, Japan
TEL: +81-770-21-1711 FAX: +81-770-21-1775
• Manufacturing of optical films

Zeon's Business and Strategy

This section describes Zeon's business and strategy in the Enterprise Blueprint for 2020, with the target of "Over 500 billion yen in consolidated net sales" and the mission "Zeon makes the future today through the power of chemistry."

2016–2017 Topics

The summary of Zeon's major business developments from April 2016 to the first half of 2017.

Start of mid-term management plan SZ-20 Phase III

In April 2017, Zeon Group started the new mid-term management plan for the four-year period until the end of FY 2020. The plan aims to achieve the Enterprise Blueprint for 2020 goal of 500 billion yen in consolidated net sales by providing solutions that combine Zeon products and services.

Asia Technical Support Laboratory (ATSL) opened in Singapore

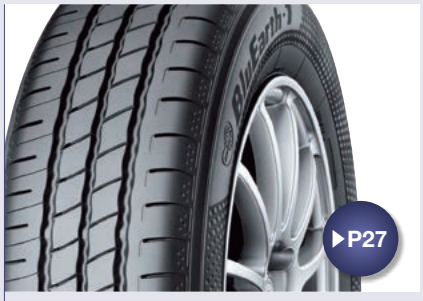
In July 2017, ATSL opened in Singapore to offer technical support to manufacturers of oil seals and other specialized rubbers. ATSL enhances Zeon's technical services for specialized rubbers in the ASEAN and Indian regions, where growth in vehicles with internal combustion engines is expected.

Mexico plant began operations for powder slush compound (PSC)

Zeon Kasei has constructed a plant in Mexico to produce PSC used in automotive dashboards. The plant began full-scale operations in June 2017. The plant supplies PSC for automotive production in the growing North American market.

Expansion of Mizushima Plant

In July 2016, construction to increase the production capacity of Quintac® thermoplastic elastomers and ZEONEX® and ZEONOR® cyclo-olefin polymers at Mizushima Plant was completed. Hydrogenation facilities for Quintone® petroleum resin were installed in July 2017.



ZS Elastomer Co., Ltd. begins operations for S-SBR

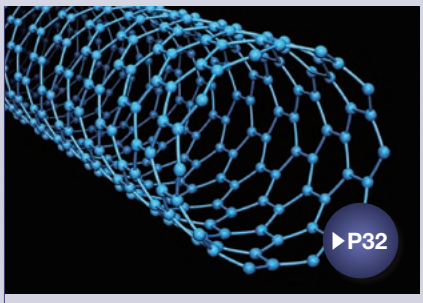
ZS Elastomer was established as a joint venture between Zeon Corporation and Sumitomo Chemical for solution-polymerized styrene butadiene rubber (S-SBR) and began operations in April 2017. ZS Elastomer handles sales and research and development of S-SBR.

Zeon Chemicals Singapore (ZCS) completed second S-SBR production line

A second S-SBR production line for ZCS was completed in April 2016. The addition increases its annual production capacity from 35,000 tons to a total of 70,000 tons. The S-SBR produced here is sold through ZS Elastomer.

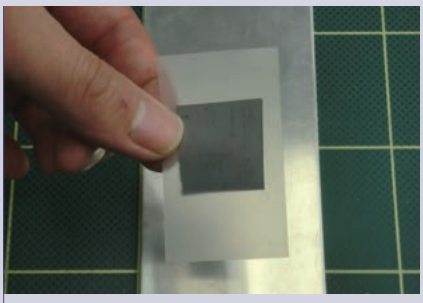
Prototype service launches for production of microfluidic chips

In March 2017, Zeon began a prototype production service for devices using ZEONEX® and ZEONOR® in the medical and biotechnology fields.



Multiple research centers established for single-walled carbon nanotubes (SWCNT)

In July 2016, the Zeon–AIST Nanotube Industrialization Cooperative Research Laboratory was established to conduct production research on SWCNT. In February 2017, the Zeon Sunarrow AIST CNT Composite Material Research Center was established with Sunarrow and AIST to conduct research and development on SWCNT composite materials.



Development of pad-type thermal interface material (TIM) achieving low thermal resistance

Zeon completed a pilot plant for mass-production of pad-type TIM using rubber/SWCNT composite in February 2016, and further development is ongoing.

New Mid-Term Management Plan Toward the Enterprise Blueprint for 2020

President Kimiaki Tanaka outlines where Zeon Group is today and its outlook for the future in a Q&A format.

Kimiaki Tanaka
President
Zeon Corporation

Q.1 Could you summarize what Zeon achieved and did not achieve in the SZ-20 Phase II plan that finished at the end of fiscal 2016?

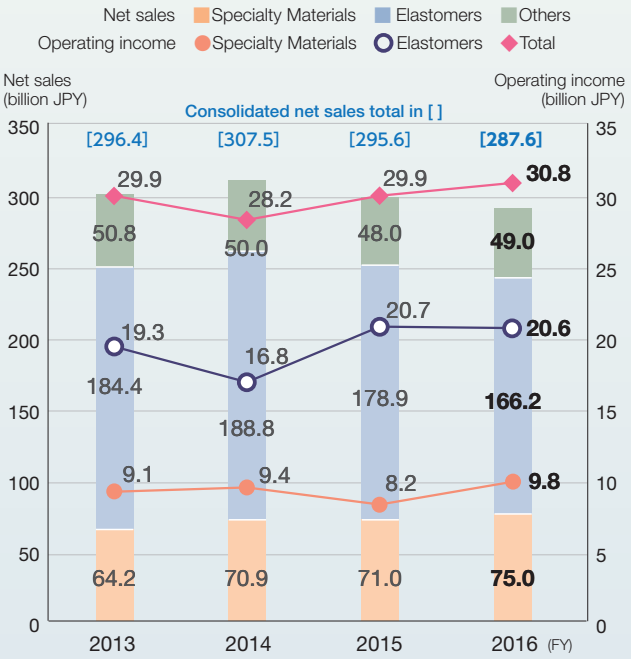
A.1 【Summary】Reforming our corporate culture is not as far along as we had planned. While Zeon's Groupwide sales have also not reached our target, the Elastomer Business has augmented its global sites in growth markets and is undergoing reorganization to achieve greater growth. The Specialty Materials Business has seen steady growth in the three key fields.

So I still see reforming our corporate culture as the most important issue we face. When we were formulating our Phase II plan, we talked about the need to change how we as individuals think and do our work, and how ultimately we need to change Zeon, which is made up of us as individuals, to achieve large and disruptive growth unlike what we have achieved in the past. And then we set about reforming our corporate culture. We have not yet arrived at where we want to be, and this is the biggest piece we did not accomplish before Phase II.

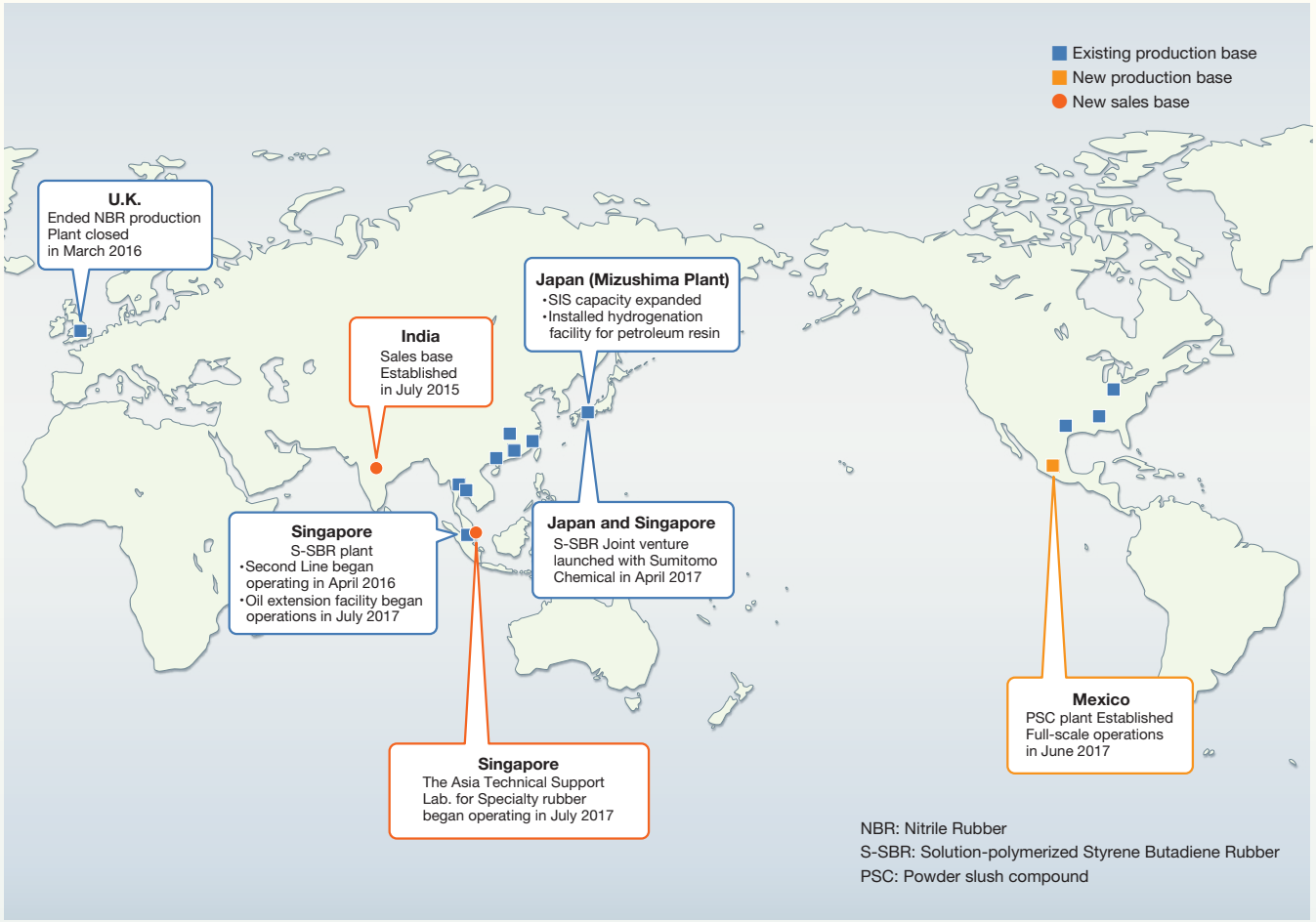
In terms of performance, Zeon's Groupwide net sales did not grow significantly, but the Elastomer and Specialty Materials businesses, and Zeon Group, were reasonably profitable (Fig. 1).

The **Elastomer Business** expanded its global sites, mainly in the growth markets of India and Southeast Asia (Fig. 2). The business also underwent reorganization with a joint venture with Sumitomo Chemical and the closing of a UK plant. Nonetheless, we are still not satisfied with our ability to meet changing market conditions. We must develop value-added, differentiated products that are not easily impacted by market swings. And we need to further increase our cost competitiveness.

●Fig. 1. Consolidated Results by Segment



●Fig. 2. The Elastomer Business has expanded its global footprint in growth markets and has been reorganized for growth

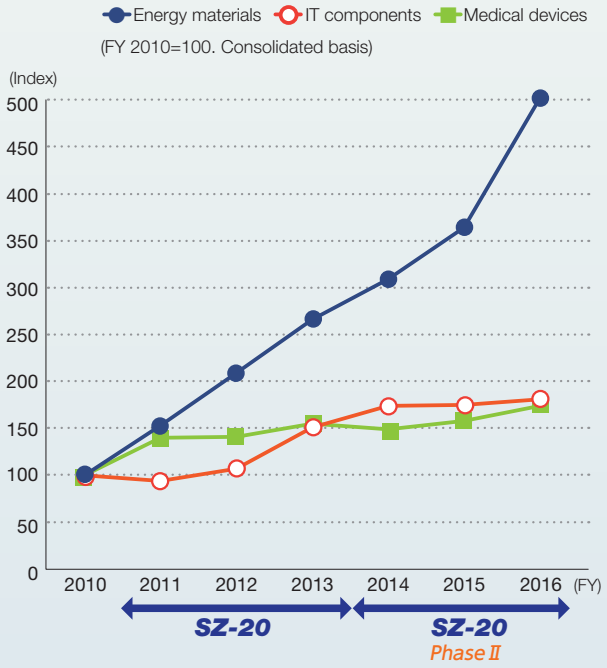


The **Specialty Materials Business** is focused on the three key fields of IT components, energy materials, and medical devices, and is showing steady growth (Fig. 3). Optical films for IT components has become one major field of business and where we have expanded our facilities. The field of energy materials has also seen a lot of growth over the last three years. We've expanded our product offerings from anode binders for lithium-ion batteries to include cathode binders and binders for functional layers. In the field of medical devices, we're seeing positive response for the FFR device we released last year.

In 2015, we finished building the world's first mass-production plant for single-walled carbon nanotubes. We have set up a research center together with a number of companies and groups are now working to develop applications for the carbon nanotubes.

While it has had many successes, our Specialty Materials Business as a whole has not managed to achieve dramatic growth, and needs to develop new products and expand production to reach the scale of our Elastomer Business.

●Fig. 3. The three key fields of the Specialty Materials Business Net sales index



●Fig. 4. New mid-term management plan SZ-20 Phase III: Groupwide strategy

Q.2 In the Groupwide strategy for the new mid-term management plan SZ-20 Phase III (Fig. 4), what are the objectives of "reinforce," "explore," and "solution"?

A.2 【Summary】We will provide added value by satisfying customers' needs throughout the supply chain as well as their hidden needs. By reinforcing and exploring products and services, we will create and provide solutions.

Just providing product samples is not enough to get customers to use new products. We have to offer new products with an understanding of how the customer will process the product and what kind of equipment they need for this. For example, I used to work in the field of etching gases. If a gas is toxic, then the customer needs to use a gas detector, mask, and gloves, and also needs the relevant safety information. And if it's a new substance, the customer might not have the peripheral equipment and other things they need to use the substance. The solutions we're talking about are packages of all of these things sold as a set.

Rubber, latex, and some other chemicals with a long history as stand-alone products have not required these peripherals. However, by removing the barriers between departments, bringing together the knowledge that exists throughout Zeon, and combining our technological expertise, we can *reinforce* these products. And if we also work together with outside partners to bring in new knowledge, we will be able to create more new applications and products. This is the meaning of *explore*.

Reinforcing and exploring enables us to see across the entire supply chain for the customer—not just procurement but planning and development as well as sales and after-sales service. I want us to expand our business with the mindset of creating added value to meet customers' known and hidden needs by combining our products with services.

Q.3 Zeon has set the three new key development areas of Global Environment, Health and Living, and Smart Devices (Fig. 5). How is Zeon involved in these fields?

A.3 【Summary】Taking a bird's eye view of all of Zeon, we have great potential for growth, and these key development areas have high probability of innovation.
In addition to development in new areas, we are also looking at applications for existing products and new applications development. (Related➡P31 Research and Development)

In the past, we set three key business fields just for the Specialty Materials Business, but we include the Elastomer Business in these new areas to add heightened perspective and broader range. These areas were chosen because they have large growth potential after 2020, and we see high probability of contributing to innovation with Zeon technologies.

The Global Environment area includes batteries and power generation, where we have contributed energy materials, and

automobiles, reducing fossil fuel use, and energy conservation, which involve our Elastomer Business.

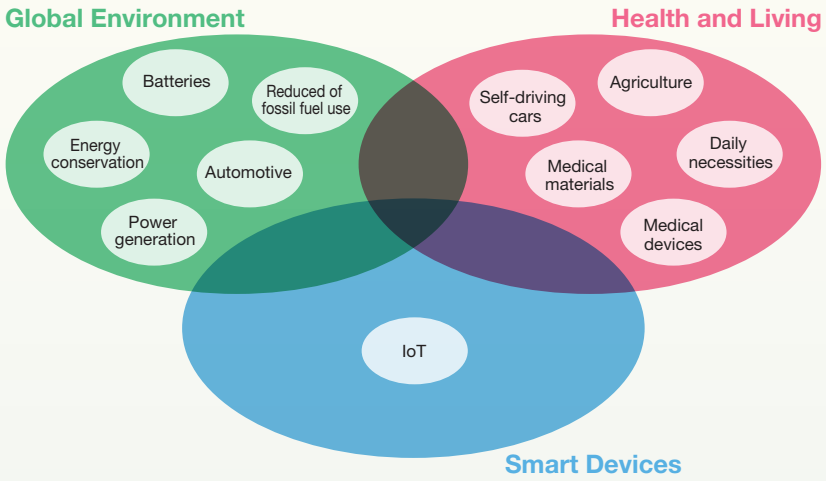
In the field of self-driving cars in Health and Living, the market for automotive sensing cameras is growing as self-driving car technology advances, and we anticipate related new product development in high-performance resin.

Smartification will continue to advance, and the IoT field in Smart Devices encompasses all fields in the Global Environment and Health and Living areas. All of these fields are connected to Zeon's business.

To expand our business scale, we must launch new products to create new business. And we have to do more than just launch new products—we have to harness other potential within Zeon. For instance, divisions should be introducing other divisions' products to their customers and finding new markets for existing products. Zeon Group can create new value by exploring ways to leverage our customer relationships and combine our products and technologies.

R&D is central to this, and we are reorganizing our research organization and starting new initiatives to strengthen our cooperation with outside partners.

●Fig. 5. Groupwide strategy (2) Key development areas



Q.4 How will you achieve the Groupwide strategy of cultivating Zeon's corporate culture? What outcomes have been achieved through the ongoing *Taimatsu* (Torchlight) activities and activities for a healthy workforce?

A.4 【Summary】We will continue efforts to develop our corporate culture and create ways to generate and apply ideas. (Related ➡P39)

While the mid- to long-term outlook holds much uncertainty, we will not be able to generate new things if we hesitate to act from fear of failure. To achieve our growth strategy, all employees need to take action, and this is why I believe reforming our organizational culture is the most important issue that we face.

As a team, I want us to create an organizational culture that encourages individuals to take the initiative and think about what is possible and how to achieve it, and then take action.

We have conducted activities to encourage dialogue that transcends the barriers within and between organizations. We call these *Taimatsu* (Torchlight) activities because we want them to light a fire in people's hearts. The Torchlight activities have been going on for six years now, and we will continue them and make them a fixed feature of Zeon Group. We hear about the results the Torchlight activities are achieving during twice annual plant visits senior managers make to engage in dialogue and at meetings to report on ZΣ improvement activities. We're going to continue these activities in our Phase III plan as well as make it easier to get ideas and suggestions through two-way dialogue between management and employees and offer support to realize them. We will also try some new ways to get ideas and suggestions and see them realized.

In addition, the health and well-being of all Zeon employees is a source of our strength. Right now, we have a high rate of abnormal results in routine physical exams among employees at both the Head Office and plants. We welcome all employee efforts big and small to become healthier, and as a company we are developing initiatives and creating conditions for better health and well-being. Specifically, we will continue efforts to improve employee lifestyle habits based on data including from physical exams, to detect changes in health early through stress checks, and to reduce excessive working hours.

Groupwide Strategy (3):
Cultivate a Corporate Culture

- ***Taimatsu* (Torchlight) Activities**
- **Dialogue between management and employees**
- **System to support and generation of ideas**
- **Promotion of diversity**

Q.5 What challenges does diversity pose, and what initiatives are you undertaking?

A.5 【Summary】**Diversity is a key component of strengthening our global development. We will continue the initiatives we have been implementing, including advancing women's participation in the workplace.**

In SZ-20 Phase III, global markets are the main focus of our business expansion. So it becomes increasingly important for us to understand and embrace the cultures and customs of our global customers and business partners. Zeon's percentage of women in senior management positions is also not high.

I believe that greater diversity leads to more opportunity to create change in people and organizations and achieve growth. As part of this, we will continue to have senior managers and women employees engage in dialogue.

We also want to have greater diversity in terms of more participation by non-Japanese employees, older employees, and employees with disabilities. For example, local Singapore employees are senior managers at our plant in Singapore. We will create workplace conditions that allow more diverse human resources to play an active role irrespective of gender.

Q.6 What are the key points of Zeon's Elastomer Business strategy?

A.6 【Summary】**We will continue to assess added-value product fields and globally reorganize the business to move away from commodities toward specialty products.** (Related ➡ P27)

Synthetic rubber is made from a limited source, and in the rubber business we aim to use the raw material in products that are more in demand by customers and contribute to society. We are focusing on quickly identifying value leading to differentiation, and on specialty products with recognized value instead of commodity products easily impacted by market swings. Our specialty rubbers such as Zetpol®, acrylic rubber, NBR, and S-SBR are products we are targeting for reinforcement.

S-SBR was created in collaboration with Sumitomo Chemical, and we launched the joint venture ZS Elastomers in April of this year. We intend to create technology and production synergies to take a leading position in the global marketplace. In July, we opened the Asia Technical Support Laboratory (ATSL) to support the growing ASEAN and Indian region and are offering solutions in specialty rubbers to expand business.

In the latex business, we are targeting sales of new products in the growing industrial gloves market and development of emulsion IR.

We will expand our business in petroleum resin with hygienic materials applications using our proprietary hydrogenation technology. In thermoplastic elastomers, we are exploring new applications for Asymmetric SIS. We received the 2016 Award of the Society of Polymer Science, Japan in the Technology category for Asymmetric SIS **(Related ➡ P32)**.

Demand is rising for powder slush compounds, which are used in automotive interior applications, along with higher global vehicle production. We are augmenting our supply structure and business with a new plant in Mexico to serve the large North American market. This is our third plant following ones in Japan and China.

SZ-20 Phase III: Strategy by Business Segment

Elastomer Business

- Reinforce competitive businesses by responding globally to growth markets and raising cost effectiveness.
- Explore new opportunities and achieve growth based on the trust built in the market and relationships with customers.

➡ S-SBR Highlight 1 P3
➡ Elastomer Business strategy P27

Q.7 What are the key points of the Specialty Materials Business strategy?

A.7 【Summary】**Expand product volumes and applications in response to the growing market.** (Related ➡ P29)

Strong-performing optical films that use ZeonorFilm® meet growing demand for large sized and high-resolution LCD panels. We will also enter the promising Organic EL display panel market with a portfolio of new components and materials.

Cyclo-olefin polymer is a high-performance resin, and we will offer solutions through one-stop service providing prototypes

targeting the medical and biotechnology fields.

We will steadily expand our business in energy components with distinctive products mainly for the automotive market that meet needs for battery safety, extended life, and higher output. We intend to expand our market share by achieving growth that outpaces market growth.

In the area of medical devices, we plan to expand our market share of FFR devices while also focusing on devices for the digestive system.

In new specialty materials, in 2018 we expect to commercialize a thermal interface material that is a rubber–carbon nanotube composite. We intend to grow this into a major business area with applications development mobilizing its properties.

SZ-20 Phase III: Strategy by Business Segment

Specialty Materials Business

- Expand business in step with the speed of market growth and technological progress through focused investment of resources and stronger collaboration with outside players.

➡ Energy materials Highlight 2 P5
➡ Specialty Materials Business Strategy P29

Q.8 What approach are you taking to achieve the Enterprise Blueprint for 2020 target of 500 billion yen in net sales?

When we were drafting the SZ-20 plan in 2011, we had consolidated sales of around 250 billion yen. We set the goal of doubling this to 500 billion with the aim of achieving disruptive growth. This is still our approach today. To achieve disruptive growth along with major business expansion, we will invest in facilities at an early stage and may use M&A as well.

In SZ-20 Phase III, we added the phrase “employees’ individual growth” to the Enterprise Blueprint for 2020. This reflects our belief that it is important for everyone, from senior managers to workers on the plant floor, to take the initiative and achieve growth for their self-realization.

Our central focus is on changing our corporate culture and organization, which we believe will in turn lead to higher sales and profit. Through this process, we aim to continue contributing to realizing customers’ dreams and a prosperous society.

Enterprise Blueprint for 2020

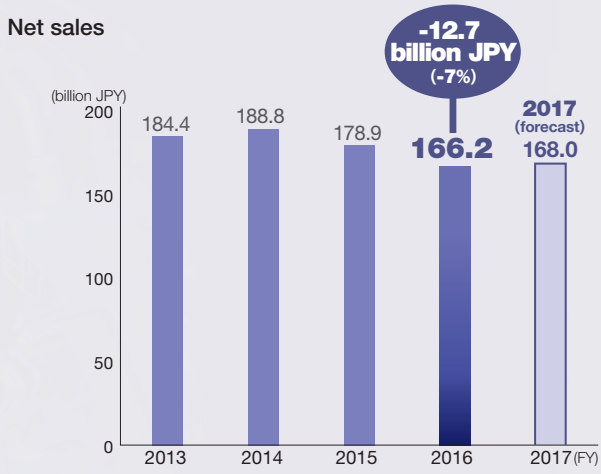
Zeon makes the Future Today through the Power of Chemistry

Zeon will continue to contribute
to the realization of customer dreams
and a prosperous society
through employees’ individual growth.

Targeting consolidated net sales over 500 billion yen in FY 2020

Elastomer Business

In elastomers, our main business involves the three fields of synthetic rubber, synthetic latex, and chemical products, the main raw materials of which are C_4 and C_5 fractions derived from naphtha. In 1959, Zeon became the first company in Japan to mass-produce synthetic rubbers. Even today, the Elastomer Business is the core Zeon business, providing 60% of total net sales and operating income.



Business overview and future strategy

In the Elastomer Business, the Enterprise Blueprint for 2020 calls for taking the front-runner position globally in synthetic rubbers. Being the front runner means being the supplier able to offer best value that customers identify with and endorse.

A major development in fiscal 2016 was the merger of our S-SBR business with Sumitomo Chemical Company and the establishment of ZS Elastomers Co., Ltd. Zeon and Sumitomo Chemical handle production of S-SBR, while ZS Elastomers handles R&D and sales. We expect to generate new synergies through the combination of both our companies' technologies for S-SBR with modified terminals. The S-SBR business will continue to expand, and we are also exploring investing in new facilities for future development.

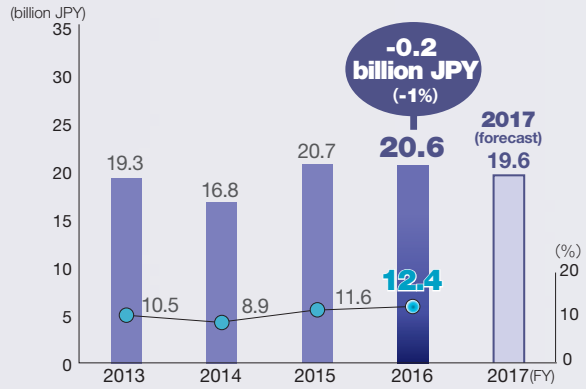
The specialty rubbers business including NBR, hydrogenated NBR, and acrylic rubber will see growth along with higher automobile production primarily in emerging countries. Automakers are focusing on developing electric vehicles, but we see internal combustion engine vehicles as continuing to be the mainstream in the ASEAN and Indian region until around 2040. We are targeting the ASEAN-Indian region in our specialty rubber business and established the technical support organization ATSL (see Topics on right) in Singapore to strengthen our competitiveness. We are enhancing Zeon's value by hiring local engineers to visit customers in the region and provide a range of solutions.

New synthetic latex products that we released in the second half of 2016 begin to demonstrate results in 2017. We are shifting our focus from disposable latex gloves to products with higher added value. Our NBR latex for industrial gloves is resistant to tearing, and emulsion IR for surgical gloves feels comfortable and does not contain proteins that cause allergic reactions. These are some of Zeon's added-value offerings.

In our chemicals business, we received the 2016 Award of the Society of Polymer Science, Japan in the Technology category for Asymmetric SIS (thermoplastic elastomer SIS). Asymmetric SIS offers both high strength and flexibility, properties that are challenging to achieve together with conventional elastomer technologies. Asymmetric SIS shows development promise in a number of new applications such as elastic films used in disposable diapers. We increased the production capacity of Mizushima Plant in 2016. Hydrogenation facilities for C_5 petroleum resin were installed at Mizushima Plant in July 2017. Hydrogenated petroleum resin has beneficial properties including low odor, transparency, and low VOCs, making it a promising material for disposable diapers along with Asymmetric SIS.

Hiroyuki Hirakawa
Director & Senior Corporate Officer
Elastomers and Chemicals Business
Division Manager – Logistics

Operating income (ratio)



Segment ratio 62%

Elastomer Business breakdown (FY 2016)

	Sales quantity (1,000 tons)	Net sales (billion JPY)
Rubber	308 (↓4%)	112.5 (↓5%)
Latex	121 (↓2%)	17.8 (↓7%)
Chemicals	129 (↑3%)	32.9 (↓14%)

●**Reason for -4% change in rubber sales quantity**
General purpose -2%: Japan -9%, global +4%
Specialty -6%: Japan +5%, global -11%

●**Change in specialty rubber ratio**
Quantity basis in 2015: 31% → 2016: 30%
Value basis in 2015: 58% → 2016: 54%

Zeon Kasei's Mexico plant began operations for powder slush compound (PSC) manufacturing in June 2017. Use of PSC in automotive interiors is growing due to its excellent design and mold fabrication properties and inexpensive cost. Products produced at the plant are supplied to automotive manufacturers in the Americas, where expansion is continuing. This is our third PSC plant in addition to the Ibaraki Plant in Japan and the Changshu Plant in China. Going forward, we will also explore plant development in Europe.

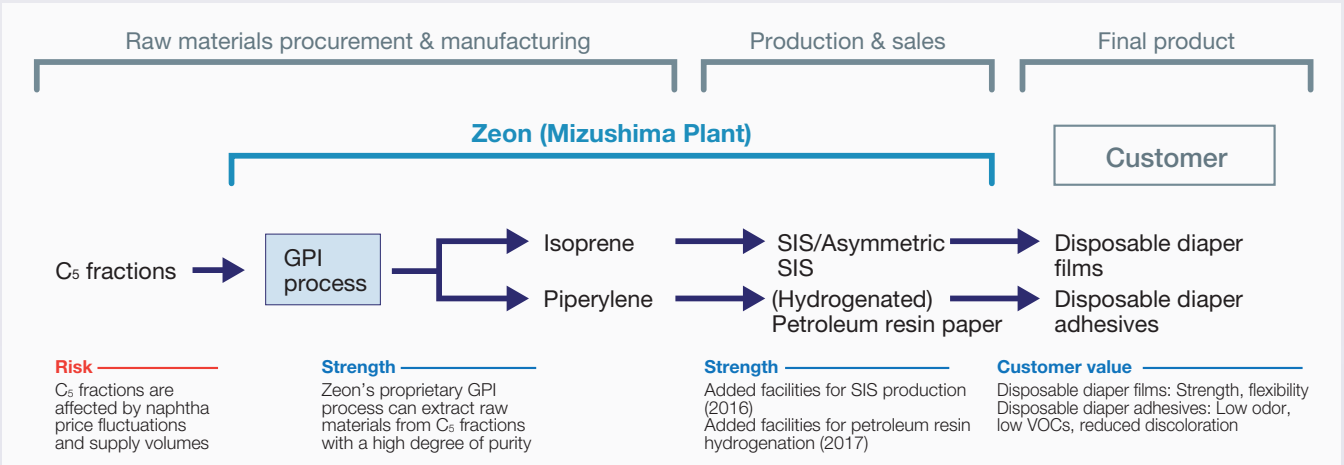
We are currently in the process of rebuilding our global production capacity. Demand for automotive applications is rising in Asia, while political regimes in various countries are undergoing major changes. These factors are affecting the suitability of production sites. We are therefore reorganizing where we make Zeon products, including increasing and suspending some production operations. In addition, we need to realize disruptive growth to achieve our new mid-term management plan targets. We will explore M&A under the right conditions as part of this.

TOPICS

Technical support center for specialty rubbers opened in Singapore

The Asia Technical Support Laboratory (ATSL) was established in July 2017. The ATSL provides technical support to customers in areas such as blending, kneading, and evaluating specialty rubbers primarily used in peripheral automotive engine parts. By providing customers with proven solutions to their challenges, we will enhance Zeon's presence in the ASEAN–Indian region, where growth in internal combustion engine vehicles is forecast.

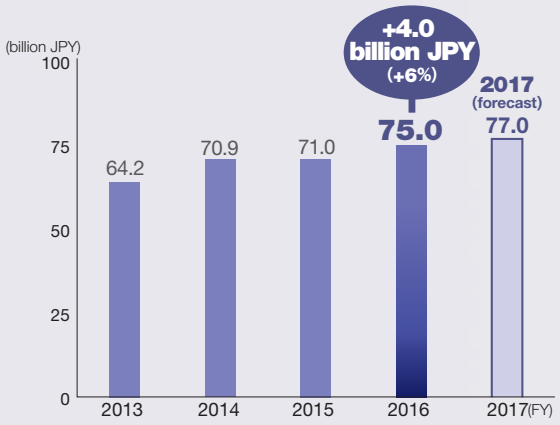
●**SIS and Asymmetric SIS thermoplastic elastomer, petroleum resin, hydrogenated resin production and use**



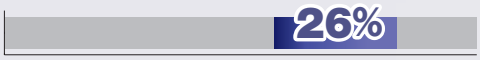
Specialty Materials Business

Specialty materials refers to materials and components offering high added value due to their macromolecular design and processing technology.
Focusing on future growth areas, we are positioning IT components (optical, packaging, electronics), energy materials, and medical devices as our three main business areas.

Net sales



Segment ratio



Business Overview and Future Strategy

In the Specialty Materials Business, we are using unique concepts based on innovative original technologies to produce products with high added value that are not overly influenced by conditions in the materials market.

To achieve our Enterprise Blueprint for 2020, we will expand business in step with the speed of market growth and technological progress through focused investment of resources and stronger collaboration with outside players.

Optical films are a core business of our Specialty Materials Business. Offering excellent performance, demand for large-screen TVs is rising, although demand has fallen somewhat for smartphones and other small displays. Demand is growing overall, and we anticipate stable demand in the years ahead. We have entered the growing market for organic EL panels (OLED) with new components based on new retardation film development.

Hiroshi Fujisawa
Director & Corporate Officer
Specialty Business
Division Manager – Specialty Chemicals

Onboard sensors supporting self-driving car technologies represent a new promising market for cyclo-olefin polymer (COP) of the specialty plastics division. Demand for optical lenses for sensors is anticipated.

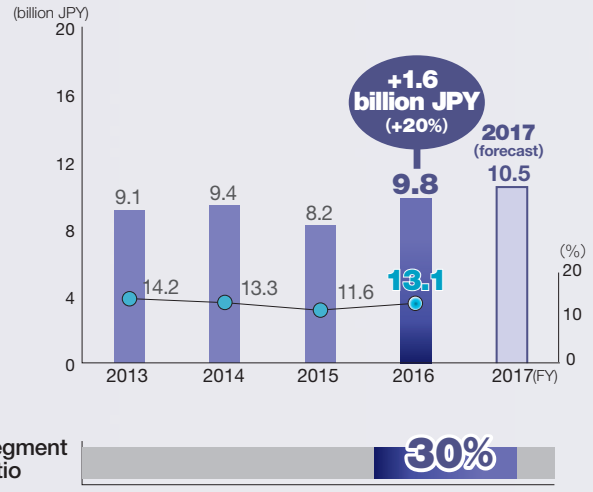
COP is gradually being adopted as a pharmaceutical packaging material alternative to glass in syringes pre-filled with drug solutions. We expect use of COP to expand along with market expansion as medical institutions seek greater labor savings and pharmaceuticals come increasingly pre-packaged. In 2017, we began a prototype provision service for microfluidic chips (see Topics). We are aiming to develop this service in the medical and biotechnology fields by conducting R&D looking to future mass-production.

In energy materials, demand for electric vehicles (EV) is forecast to rise, and with it the market for materials used in lithium-ion batteries for the automotive industry is also forecast to grow. We anticipate growth in environmentally friendly aqueous anode and cathode binders that replace organic solvents as well as separators that contribute to improved battery insulation. We intend to increase our market share through systematic facilities investment to augment our capacity and further performance improvements in our components and materials. (Related➡P5)

We are aiming to double the scale of our medical devices business between FY 2016 and FY 2020. Our market share target of FFR devices, where solid growth is being seen in circulatory system applications, is 30% by fiscal 2020. Regarding the endoscopic business, we plan to release new products for the removal of bile duct stones and stents.

In electronics materials, higher quality is being demanded of materials as semiconductors become increasingly miniaturized. We are going to introduce electronics materials that satisfy the required quality, including etching gases, insulation materials, and resists, to enter the market. In the display market, we are expanding sales of insulating films with properties of high transparency, low water absorbency,

Operating income (ratio)



Segment ratio

Specialty Materials Business breakdown (FY 2016)

	Net sales (billion JPY)	% change
Specialty chemicals	20.8	↑10%
Specialty plastics	49.0	↑4%
Medical, etc.	5.2	↑8%

- **Reason for +10% change in net sales in specialty chemicals**
  Specialty chemicals +3%, electronics materials +1%, battery materials +38%, toners -3%
- **Reason for +4% change in net sales in specialty plastics**
  COP resins -8%, optical films +8%
- **Optical film sales volume: +21%**
- **Ratio of optical films for small displays (net sales)**
  2015: 37% → 2016: 18%

low outgassing, and high insulation.

We are seeing strong sales in specialty chemicals that offer original Zeon advantages. These include aroma chemicals, solvents for semiconductors, and Prohydrojasmon, plant growth regulator. We are not only making specialty chemicals sold on a stand-alone basis, but also specialty chemicals that use for other materials and components or are required in new product production. Specialty chemical coatings to improve film performance and processing solvents are two examples. A role of the Specialty Chemicals Division is to work across business divisions to enhance Zeon products. We intend to further strengthen this type of collaboration that brings together multiple divisions.

As our first component using single-walled carbon nanotubes (SWCNT), we have commercialized a pad-type thermal interface materials that combines SWCNT with rubber to greatly lower thermal resistance and improve heat radiating performance. This product contributes to smartification by helping lower the semiconductor temperature of servers and power devices and resolving their problematic heat generation. We will continue research on compounds using Zeon materials and seek out joint research opportunities with a range of outside companies and groups. **(Related➡P20, 32)**

TOPICS

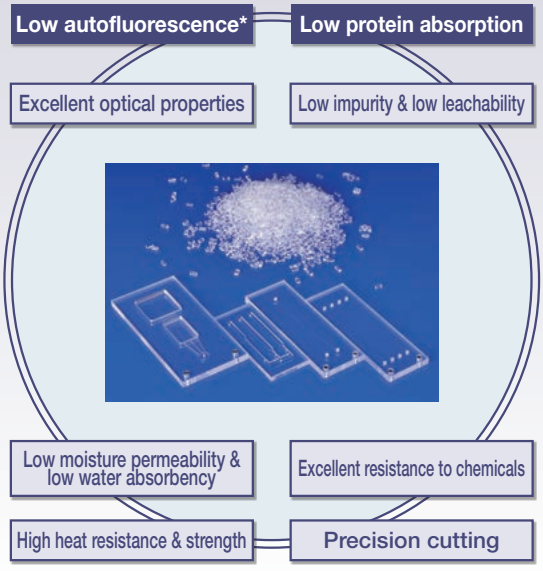
Prototype service launched for production of microfluidic chips using COP

Microfluidic chips are transparent circuit boards with microfluidic channels in which reagents flow. This allows for easy observation of chemical reactions in applications such as disease diagnosis. The development is continuing in the drug development and medical testing and diagnosis fields in anticipation of growing this into a major market in the future.

Demand is now rising for microfluidic chips in devices designed to detect objects at high speed and with high sensitivity. COP has better properties as a microfluidic chip material that make it suited than glass, which is the mainstream material used today. These include low autofluorescence, low protein absorption, and ease of precision etching.

This service receives orders from research institutes, universities, and other groups to manufacture chips using COP for research purposes. Along with limited production of a wide variety of products for research purposes, we are supporting chipmaking that leverages the material's properties with an eye to mass-production using our expertise as a resin manufacturer.

*Autofluorescence: The natural emission of light by structures after they have absorbed light. Lower autofluorescence is preferred due to noise during analysis



Research and Development (R&D)

The R&D Center conducts Zeon Group's R&D activities with a workforce of more than 400 researchers. In addition to the R&D Center's 10 research buildings located next to the Kawasaki Plant, we have established other laboratories located near production plants. We develop new products and improve existing products through close collaboration with business units to meet the needs of customers. Additionally, we are exploring new materials, developing and using new analysis and simulation techniques, and developing and improving production processes and equipment.

R&D expenses

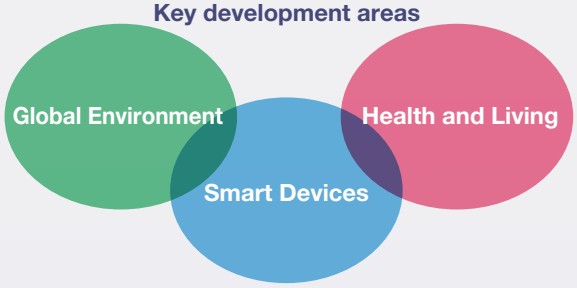
Major research themes in key development areas

Major research themes are needed to contribute to achieving the Enterprise Blueprint for 2020 and its goal of 500 billion yen in net sales. We strive to create these major research themes as well as to quickly generate results.

We have defined the three priority markets to target as Global Environment, Smart Devices, and Health and Living. To explore research themes, we will create task forces comprising researchers with advanced specializations, and will define the research themes by backcasting (reverse forecasting) from future market forecasts.

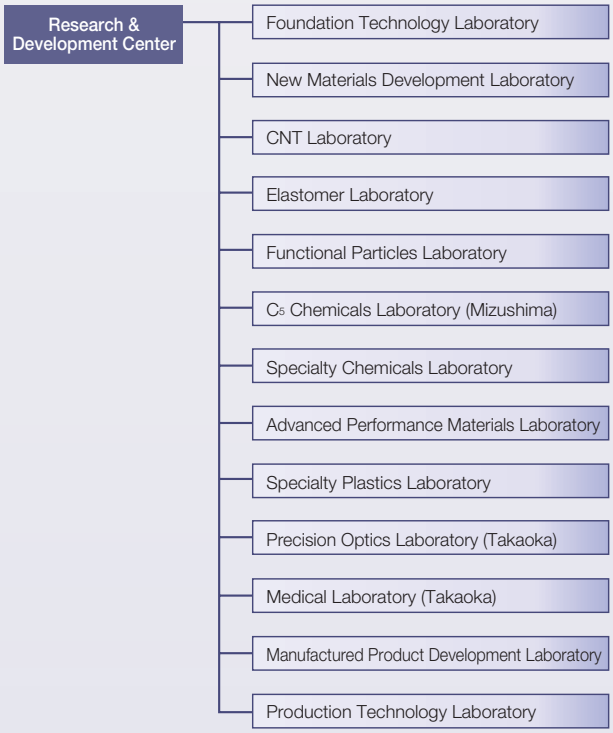
Generating results means launching products in the markets. We will reorganize and reinforce our organization to commercialize a large number of major research themes.

Key development areas



Define research themes by backcasting (reverse forecasting) from the market forecast for the area

●R&D System



Sachio Hayashi
Director & Senior Corporate Officer
Research & Development
Division Manager – Research and Development Center

Organization for new synergy creation

We reorganized our R&D system in April 2017. We integrated separate laboratories for electronics materials and specialty chemicals into the Specialty Chemicals Laboratory. We also integrated laboratories conducting research on toners and the molecular properties of latex into the Functional Particles Laboratory. We expect to create new synergies from these moves to combine overlapping areas of research.

We are also purposefully creating exchanges among researchers in our Japanese and global laboratories.

Strengthening collaboration with outside parties

We need even more manpower to conduct research on a number of new themes and shorten the time to product launch. This is why we are continuing to ramp up our joint research activities with other companies, public research institutes, and universities. We are collaborating on the sidelines on various research themes and will explore partnerships with outside players including some of our competitors according to the anticipated outcomes.

IP strategy

We are working to expand our intellectual property rights with the key phrase “patent first” to enhance our competitiveness and contribute to industry development in line with our corporate strategy.

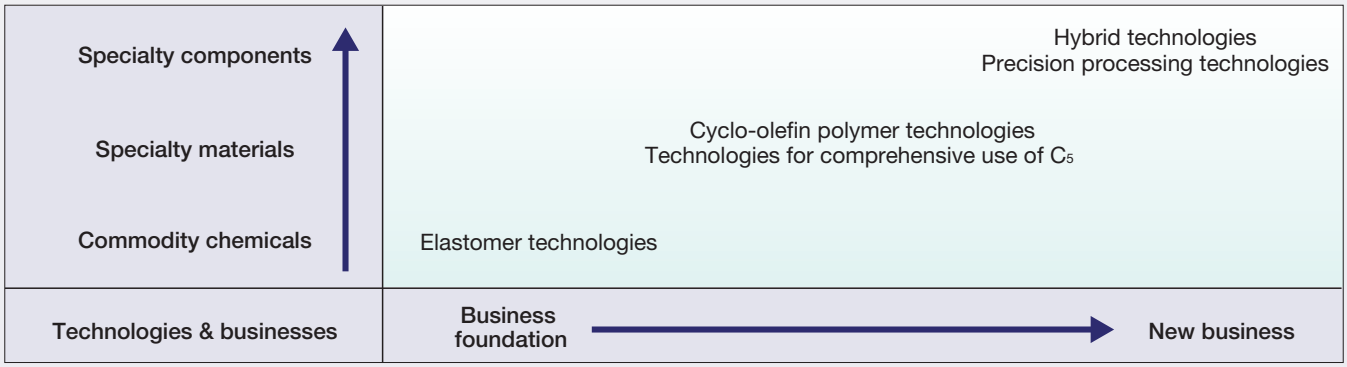
At Zeon, we define “patent first” as investigating patents at the initial product development stage, proceeding with development based on the patent strategy, and filing patent applications before announcing products and providing samples.

We will maintain a high degree of competitiveness based on patents that combine and apply leading individual technologies.

From materials to components and solutions

Zeon has primarily offered materials as a chemicals manufacturer. In the years ahead, we will process these materials to add value and create solutions. For example, we will offer our materials together with technical usage support in the same way we have processed cyclo-olefin polymers to produce films as high added-value components. To do this, we are focusing on R&D and strengthening coordination with customers.

●Zeon’s technology advances and business development



TOPICS

Awards for research results

In May 2017, we received the 2016 Award of the Society of Polymer Science, Japan in the Technology category for development of styrene-isoprene-styrene block copolymer, which has an asymmetric structure (Asymmetric SIS).

Asymmetric SIS not only offers dramatic performance gains over conventional products, it also offers functional properties that are a challenge to achieve together and is seen as having potential widespread application.

TOPICS

Joint research on carbon nanotubes

Zeon is the first company in the world to commercialize single-walled carbon nanotubes (SWCNT) in the *Super-Growth* method. In compounds with various materials, SGCNT are expected to demonstrate novel properties and performance. Zeon is participating in a number of projects and engaging in applied research.

- Participation in the Project for Super-Rapid Development Infrastructure Technologies for Super-Advanced Materials/NEDO*1 project (May 2017)
- Zeon Sunarrow AIST*2 CNT Composite Material Research Center established (February 2017)
- Development of thermal interface material (TIM) as a high-performance thermal pad using SWCNT and rubber compound through Research Projects for Commercializing Nano-Carbon Materials to Realize Low Carbon Society (November 2016)
- Zeon–AIST Nanotube Industrialization Cooperative Research Laboratory established (July 2016)

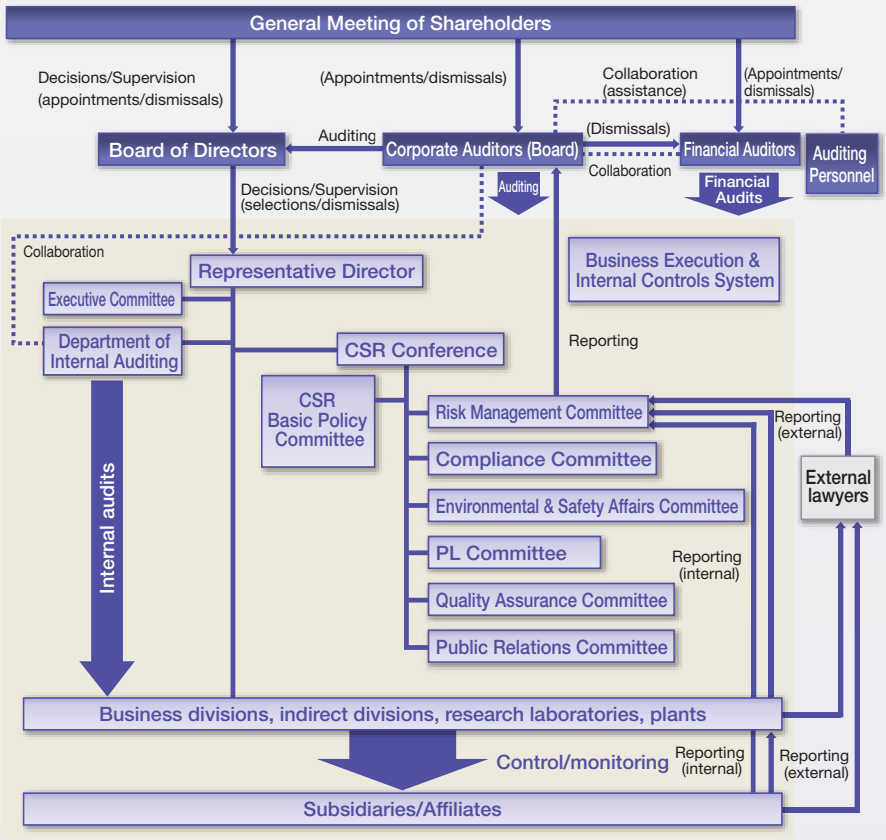
*1 NEDO: New Energy and Industrial Technology Development Organization
*2 AIST: National Institute of Advanced Industrial Science and Technology

Corporate Governance

Zeon aims to increase profits and enhance corporate value on an ongoing basis while respecting and balancing the various interests of its shareholders and other diverse stakeholders. To this end, we are continuing efforts to build a system that enables efficient and sound corporate management through corporate governance.

Having a system of corporate governance allows us to clarify the functions and roles of each organizational entity within the company and to carry out rapid decision-making and execution. We are also improving corporate transparency through appropriate monitoring and disclosure of business activities and their effects. We are determined to further enhance our corporate governance system to effectively carry out these aims.

●Corporate Governance System



●Board of Directors

The Board of Directors meets, in principle, every month with corporate auditors in attendance to ensure compliance with applicable laws and the Articles of Incorporation in the execution of business. In addition to its statutory duties, the role of the Board of Directors is to make important decisions about basic management policy, strategy, and other aspects of business execution. As of October 2017, the Board of Directors consists of 12 directors, including three outside directors.

●Executive Committee

The Executive Committee, in accordance with the Executive Committee Rules, comprises the President and executive officers ranked senior corporate officer or above and meets twice a month in principle to examine and make decisions on important business matters after due deliberation involving consultation with attending full-time corporate auditors. Important business matters stipulated in the Board of Director Rules are examined and decided by the Board of Directors.

●Board of Corporate Auditors

The Board of Corporate Auditors comprises five members, including three outside corporate auditors. The Board reports, discusses, and adopts resolutions on important business matters. In accordance with the auditing guidelines established by the Board of Corporate Auditors, each corporate auditor audits directors' execution of their duties through various means, such as attending Board of Directors meetings and monitoring business operations, including subsidiaries' operations.

Risk Management

The Risk Management Committee and the Compliance Committee, along with the Compliance Committee's subcommittees, namely the Antitrust Law Regulatory Subcommittee, the Export Security Control Subcommittee, the Corporate Governance Subcommittee, and the Information Security Subcommittee, are advancing Zeon's risk management and compliance initiatives.

●Risk Management and Compliance System

Directors and Officers (as of October 1, 2017)

Directors

Chairman
Naozumi Furukawa
Chairman of Tohpe Corporation

President
Kimiaki Tanaka

Director & Senior Corporate Officer
Hiroyuki Hirakawa
Elastomers and Chemicals Business
Division Manager – Logistics

Director & Senior Corporate Officer
Toru Nishijima
Production and Engineering Technology
Division Manager – Production Center
Department Manager – Production Administration

Director & Senior Corporate Officer
Hirofumi Imai
Administration
Division Manager – Raw Material
General Manager – Department of China Business Administration

Director & Senior Corporate Officer
Sachio Hayashi
Research & Development
Division Manager – Research & Development Center

Director & Corporate Officer
Takeo Furuya
CSR Division Manager – Corporate Administration
President of Zeon F&B Co., Ltd.

Director & Corporate Officer
Noboru Yanagida
President of Zeon Medical Inc.

Director & Corporate Officer
Hiroshi Fujisawa
Specialty Business
Division Manager – Specialty Chemicals
President of TFC Inc.

Director
Haruo Itoh
Adviser – Fuji Electric Co., Ltd.

Director
Takao Kitabata
Chairman of the Board – Sanda Gakuen Junior High School & High School

Director
Tadanobu Nagumo
Chairman & Representative Member of the Board – The Yokohama Rubber Co., Ltd.

Audit & Supervisory Board

Member

Tadayuki Minami
Shinichi Hirakawa

External Member

Yuzuru Fujita
Adviser of Asahi Mutual Life Insurance Company
Akio Kohri
President – ADEKA Corporation
Nobutake Nishijima
Chairman of Fujitsu Total Insurance Service Ltd.

Corporate Officer

Member

Toshihiro Inoue
Division Manager – Synthetic Latex
Tomoyuki Kose
Plant Manager – Mizushima Plant
Tetsuya Toyoshima
Director & Corporate Officer – Zeon Chemicals Incorporated
Makoto Yokota
General Manager – Business Innovation Promotion

External Member

Makoto Watanabe
Plant Manager – Tokuyama Plant
Kazuyoshi Matsuura
Division Manager – Synthetic Rubber
Takafumi Kawanaka
Plant Manager – Kawasaki Plant
Tsutomu Eguchi
Division Manager – Human Resources, General Manager – Human Resources 1

Zeon's CSR

We ensure compliance and conduct safe and stable production activities.
At our global business locations, we conduct business activities together with local residents as a member of the local community.

Zeon's CSR

Visit our corporate website for more information

Zeon's CSR
http://www.zeon.co.jp/csr_e/concept.html

At Zeon, we regard CSR activities as all activities undertaken to continue being "a company trusted and valued by society." With all employees acting with an awareness of CSR, we ensure compliance and contribute to the global environment and sustainable development through our corporate activities. In April 2010, we established the Zeon CSR Policy and the more specific CSR Code of Conduct. In January 2011, we established our CSR Management Framework.

Zeon CSR Policy (established April 2010)

1. We will ensure compliance and meet society's needs for safety and security
2. We will contribute to sustainably developing society and protecting the global environment through our corporate activities
3. We will ensure that each and every Zeon person is aware of CSR and acts accordingly

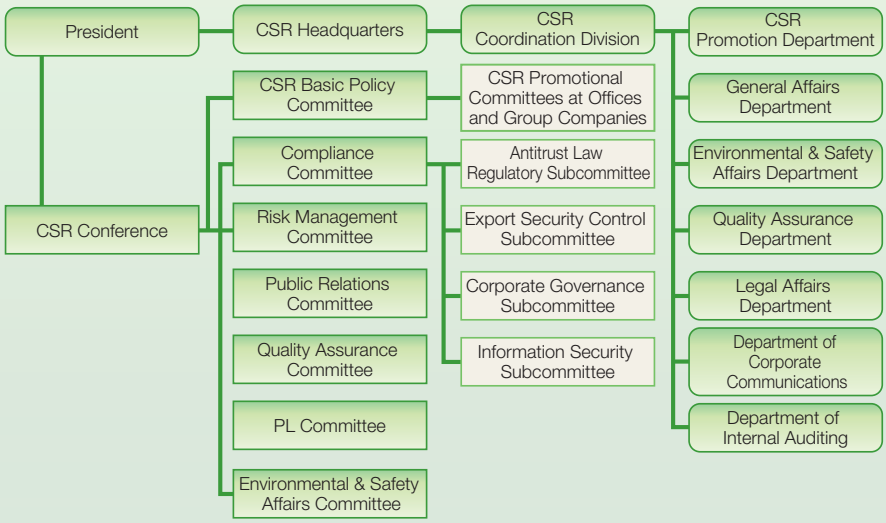
CSR Management Framework

The CSR Management Framework comprises the CSR Conference and seven committees.

Chaired by the President and held six times a year, the CSR Conference is the chief decision-making body on matters relating to CSR. The CSR Conference is held to review and finalize committee activities, initiatives, and annual activity plans, and to give necessary instruction based on progress reports.

The committees report to the CSR Conference and advance CSR activities in their specific areas. The seven committees are the CSR Basic Policy Committee, the Compliance Committee, the Risk Management Committee, the Public Relations Committee, the Quality Assurance Committee, the PL Committee, and the Environmental and Safety Affairs Committee.

●Zeon's CSR Management Framework



●Committee functions

CSR Basic Policy Committee
Provides guidance and support for CSR Promotional Committee activities. Builds systems to support making social contributions.

Compliance Committee
Education and training in legal compliance. Oversees four compliance subcommittees.

Risk Management Committee
Responsible for systematically preventing potential risks and handling risks that emerge.

Public Relations Committee
Enhances Zeon's reputation and image through communication activities. Discloses necessary information at appropriate times.

Quality Assurance Committee
Activities related to quality assurance. Reviews, takes action on, and make improvements to QA problems.

PL Committee
Manages prevention activities, training, and emergency response related to product liability.

Environmental and Safety Affairs Committee
Plans and proposes environmental and safety measures and monitors their progress.

Environment

Visit our corporate website for more information

Environment
http://www.zeon.co.jp/csr_e/environment/index.html

Environmental Philosophy (established August 2001)

1. Environmental protection is a mission of a socially responsible organization
2. Our basic belief is that environmental protection can be achieved with innovative technology
3. Environmental protection will be achieved when all employees work together with a sense of mission to overcome challenges

We established our Responsible Care Policy embodying the principles of Responsible Care*1 in 1998, and established our Environmental Philosophy in 2001. We set goals for the Zeon Group's environmental initiatives based on the two approaches of reducing environmental impacts and developing environmentally friendly products, and each plant plans and executes specific environmental initiatives.

*1 Responsible Care: A voluntary initiative by businesses that manufacture or handle chemical substances to achieve continuous improvement in health, safety, and environmental (HSE) performance across the entire life cycle of such substances—from development and manufacture, through distribution and use, and ending in final consumption or disposal—based on the principles of independent decision-making and personal responsibility. These businesses publicly commit to Responsible Care in their business policies, implement HSE-related actions, and strive to improve their HSE performance.

Reducing environmental impacts

The Enterprise Blueprint for 2020 contains the following two goals, which we are working toward. We comply with emissions standards for substances with environmental impact based on the Japanese Energy Conservation Act, Air Pollution Control Act, Water Pollution Control Act, PRTR Act, and agreements with local authorities (voluntary management standards).

Enterprise Blueprint for 2020

1.All plants receive public recognition for their environmental impact reductions
2.Proactively enhance awareness and make further improvements in the areas of the environment and energy conservation through comprehensive education

Results for FY 2016 are as follows.

- Zero environmental irregularities*2
- Environmental impact reductions
  - Acrylonitrile emissions: 4.1 tons
  - Final landfill disposal (non-consolidated): 1.7 tons
  - Final landfill disposal (Zeon Group): 2.9 tons
  - Per-unit energy consumption (FY 1990 baseline): 62%
  - Per-unit CO_2 emissions (FY 1990 baseline): 60%

*2 Environmental irregularities: Defined in Zeon Corporation company rules as the failure to meet environment-related rules and regulations and voluntary standards. Also, situations in which standards were met but may not have been if regular measures had been taken. Or when there is no set standard, any instance a complaint is received or could have been received if the situation had been left unattended.

Developing environmentally friendly products

At Zeon, we are continuing to conduct R&D with the objective of developing and launching environmentally friendly products.

As of fiscal 2016, we have successfully developed fuel-efficient tire components, low-temperature toners, fluorinated solvents and etching gases with zero ozone depletion potential, and binders for lithium-ion batteries. **(Related➡P7)**

In the years ahead, we will engage in R&D that attempts to address environment-related social issues.

Safety

Visit our corporate website for more information

Safety
http://www.zeon.co.jp/csr_e/safety.html

Safety Philosophy (established March 1997)

1. Safety is the foundation of all business activities and the greatest priority
2. Our basic belief regarding safety is that we can prevent all accidents
3. Safety will be achieved by performing the 5Ss*1 and when everyone takes responsibility for their own actions

*1 5Ss:*Seiri* (sort), *Seiton* (straighten), *Seisou* (scrub), *Seiketsu* (systematize), and *Shitsuke* (sustain)

A consistently safe work environment is the foundation of all production activities. We formulated our Safety Philosophy in 1997 based on the Responsible Care approach to guide our safety activities. Our Responsible Care Policy established in 1998 also clearly states, "Protecting the environment and ensuring safety are preconditions for all business activities and are the most important priorities."

We set safety goals based on the three approaches of eliminating safety irregularities*2, eliminating occupational accidents, and improving safety in logistics, and each plant plans and executes specific safety initiatives.

*2 Safety irregularities: Defined in company rules as the occurrence of a fire, explosion, leak, damage, failure, runaway reaction, or similar event. Or, even without an actual occurrence, the possibility of such an event if actions had been delayed, and observation of signs before such an event.

Safety and accident prevention

We conduct safety assessments and audits of plants, and provide training to enhance accident prevention awareness with the goal of achieving zero safety irregularities.

Each year, top management develops a Master Plan for Safety Management Improvements and leads initiatives to improve our Safety Management System based on the belief that ensuring safety is the greatest priority. Senior managers at Zeon visit plants on a regular basis to confirm the progress of improvement initiatives and hold informational meetings with workers to communicate directly with them. Top management visited plants over 54 days in FY 2016.

The plants conduct emergency-response drills each year based on various hypothetical scenarios. We conduct drills jointly with local fire departments when possible.

TOPICS **Systematic safety education**

Held since FY 2003, this education program aims to prevent the lessons of past accidents from fading from memory, to apply these lessons in work operations, to raise workers' awareness of safety, and to increase their sensitivity to potential risks.
Former plant managers give presentations to all plant employees. They cover specific examples of accidents at Zeon and other companies to communicate the grim consequences of such accidents, and provide instruction on how to analyze risk factors as well as countermeasures to prevent recurrences.

Education using accident case studies (Mizushima Plant)

Occupational safety

Our goal is zero occupational accidents resulting in lost work time and zero serious accidents without lost work time. There were two lost-time occupational accidents in FY 2016. We are focusing on communication between worksite supervisors and workers, safety inspections, and hands-on education in order to achieve a safe and stable production system.

Safety in logistics

We are working to maintain our achieved goal of zero accidents in logistics.

At Zeon, we established Yellow Card Management Rules for transporting hazardous products. These rules require drivers to carry a Yellow Card*3 when transporting such products. We also conduct reporting and communication training for drivers, and each plant offers training on product handling to prevent accidents in logistics.

*3 Yellow Card: Document describing what to do if an accident occurs during transportation, as established by the Logistics Safety Management Policy of the Japan Chemical Industry Association.
The document is called a Yellow Card because it is printed on yellow paper.

Labor Practices

Visit our corporate website for more information

Labor Practices
http://www.zeon.co.jp/csr_e/employee/index.html

In our CSR Code of Conduct, we stipulate respect for human rights and prohibit discrimination. We strive to be a company that understands and accepts diverse values, and where no person is discriminated against based on gender, age, nationality, or other attribute.

Based on this policy, we aim to enable every employee* to work with pride by cultivating employees to continually evolve by pursuing high goals based on independent thinking, building a human resource system in which employees take on challenges without fear of failure and gain a sense of accomplishment, and creating a comfortable working environment that values dialogue.

*At Zeon, "employees" refers to all workers including full-time and part-time workers.

Employment conditions

As of March 31, 2017, Zeon Corporation employed 1,590 people on a non-consolidated basis, and Zeon Group employed 3,090 people on a consolidated basis. The non-consolidated workforce includes 2.20% employees with disabilities, meeting the employment rate requirement. We have also adopted a re-employment system shared across Zeon Group in which employees reaching mandatory retirement age are given opportunities to continue working by passing on their skills and training successors. As a term of respect, we refer to these re-employed employees as "(Zeon) master employees." In FY 2016, 67 people became master employees.

We conduct diversity training for all employees to help create the capacity for diversity understanding. We also support employees who are balancing work with raising children and have acquired the Kurumin mark in Japan in recognition of this, based on the Act on Advancement of Measures to Support Raising Next-Generation Children.

Zeon Corporation employment information

(non-consolidated, does not include non-permanent employees)

(No.)

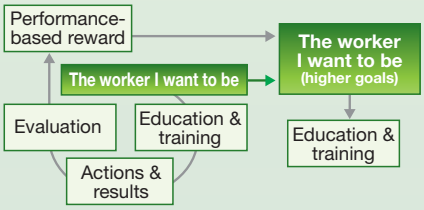
		Men	Women	Total
Employees		1,407	183	1,590
No. of new hires				
	New graduate	28	11	39
	Mid-year	2	3	5
Percentage of employees with disabilities		2.20%		
Re-employment of employees who have reached mandatory retirement age		67 (82.7%)		

Includes 12 non-Japanese employees (6 men and 6 women)
New graduate: Employees that joined the company in April 2017
Mid-year: Employees that joined the company from April 2016 to March 2017

HR development

Zeon's concept of "being the worker I want to be" embodies "persons to continually evolve by pursuing high goals based on independent thinking." Personnels are encouraged to set goals to become the worker they want to be, and we are modifying our education and training systems to allow them to bridge the gap between the current reality and their goals and facilitate goal-driven actions on a daily basis. By fairly evaluating what employees have accomplished and rewarding them accordingly, we aim for them to set even higher goals. With every personnel continuing to improve and demonstrating this in actions, we can create an even more capable workforce across Zeon.

HR development at Zeon



Fair Operating Practices

Visit our corporate website for more information

Fair Operating Practices
http://www.zeon.co.jp/csr_e/suppliers.html

Ensuring compliance is established as the first priority of the Zeon CSR Policy, and we will meet the public's expectations by having all employees act with awareness of CSR. We endeavor to engage in fair operating practices, and our CSR Code of Conduct clearly defines related matters including compliance with antitrust regulations and a prohibition on entertaining and offering gifts to overseas civil servants.

Fair competition

The Compliance Committee advances Zeon's compliance efforts. The Compliance Committee has four subcommittees, namely the Antitrust Law Regulatory Subcommittee, the Export Security Control Subcommittee, the Corporate Governance Subcommittee, and the Information Security Subcommittee.

In FY 2016, the Compliance Committee engaged in the following activities.

- Educated staff on global assignments on compliance with antitrust regulations and preventing bribery
- Conducted workshops on legal compliance at plants and subsidiaries (in and outside of Japan)
- Checked the level of compliance understanding through e-learning

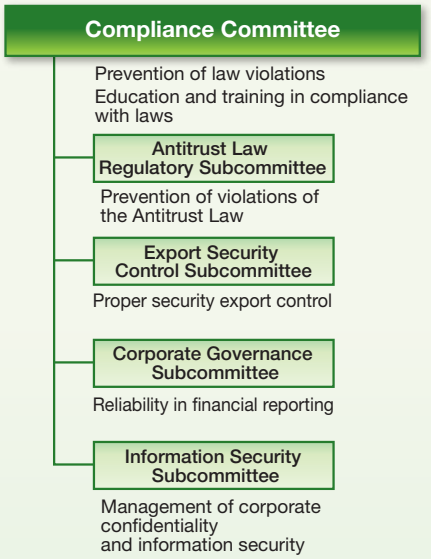
●Internal audits

Internal audits are performed for the purpose of preventing improprieties and errors in business operations.

The Department of Internal Auditing inspects and assesses whether business operations in all departments are being carried out appropriately and effectively in accordance with laws and internal regulations, and demands improvements when there are incidents of violations or non-compliance. In addition, the Department of Internal Auditing carries out periodic follow-up audits on the progress of measures taken by each department.

In FY 2016, internal audits were conducted for 34 departments (15 Zeon Corporation departments, 10 Zeon Group companies inside Japan, 9 Zeon Group companies outside Japan).

●Compliance system



Social responsibility in the value chain

In order to provide safe products to customers, we procure raw materials based on the Zeon CSR Policy and the CSR Code of Conduct. We have been developing our system of CSR procurement since FY 2012. We have established the CSR Procurement Guidelines and Requests to Suppliers, which integrate CSR perspectives into our existing QCD*.

Looking ahead, we will consolidate our approach to supply chain management and build a system for sharing our CSR policies in order to embed CSR procurement throughout the supply chain.

*QCD: System of production management that controls and improves quality, cost, and delivery.

Community

Visit our corporate website for more information

Community
http://www.zeon.co.jp/csr_e/community.html
Site Reports
http://www.zeon.co.jp/csr_e/sitereport.html

We believe that contributing to the development of local communities and building strong relationships of trust are crucial to conducting stable business activities and creating improved products and services.

Zeon's approach to social contributions

We believe that social contributions are essentially carried out through our core businesses. As companies are members of society, however, the complex set of issues faced by society and a company's activities are not independent of one another. We are therefore undertaking social contribution activities outside of our core businesses to engage with society from a broader perspective.

In 2012, we launched CSR Core Projects, which are initiatives we selected from proposals submitted by Zeon Group companies. CSR Core Projects are activities that focus on social contributions outside the scope of our core businesses and provide employees with opportunities to turn their attention to social issues.

The Head Office plans various activities related to supporting reconstruction from the Great East Japan Earthquake, as well as shared projects that are conducted across multiple plants and subsidiaries. Furthermore, plants and subsidiaries also conduct their own independent projects. We are developing activities in these three broad categories with a focus on their synergistic benefits.

●Social contributions at Zeon

FY 2016 initiatives

① Activities with the local community/ Zeon Chemicals L.P.

Zeon Chemicals L.P. (ZCLP) in U.S.A. has conducted volunteer activities and donation drives for many years.

ZCLP employees collect donations at in-house events to donate to the Make-A-Wish Foundation of Ohio, Kentucky and Indiana

② Activities with the local community/ Zeon Chemicals (Thailand) Co., Ltd.

Zeon Chemicals (Thailand) Co., Ltd. conducts communication activities with the local community, participates in local events, and makes charity donations.

Communication activities with the local community

③ Activities with the local community/ Zeon Advanced Polymix Co., Ltd.

Thailand-based Zeon Advanced Polymix Co., Ltd. has made charity donations to neighboring institutions and supported the health management of nearby residents for many years.

Donations to local temples (contributions are also made to nearby schools, hospitals, and educational institutions)

④ Holding community events

Zeon places great importance on connections with local communities. Zeon's plants and Group companies hold various events including summer festivals and welcome opportunities to participate in community events.

Tokuyama Plant sponsors the Zeon Waraku Odori Dance Festival held every summer. First held in 1974, more than 2,000 community residents participate in the festival each year

⑤ Cleanup campaigns

With the goal of conducting activities that are beneficial and will please local communities, Zeon's plant and Group companies conduct community cleanup campaigns around their sites and beyond.

Community cleanup activities around Tokuyama Plant

⑥ Educational support

Zeon's plants and Group companies offer assistance to educational institutions with internships for high school, vocational high school, and university students, by welcoming plant tours for school groups, and by sending special instructors to give lessons at schools.

Receiving interns and product inspection experience at the Optes Sano Plant

⑦ Chemistry classrooms

Based on the motto of "nurturing future Nobel Prize winners in chemistry," we are holding chemistry experiment classrooms in various areas to communicate the appeal of chemistry to children.

RIMTEC has participated in Omoshiro Taiken (fun experience) Day, an event held at Okayama Research Park, with a hands-on experiment to make plastic together with Okayama University since FY 2012. RIMTEC also received the 2016 Chemistry Communication Award

⑧ Donations of books to disaster-affected areas

Zeon supports a tree-planting campaign organized by Yokohama Rubber Co., Ltd. by serving as the event's operations staff at Otsuchi Gakuen school in Otsuchi Town, Iwate Prefecture. We also donate science and technology books to the school library at Otsuchi Gakuen.

Donating books to Vice Principal Ito (left) of Otsuchi Gakuen

Cover photo:
Zeon Corporation's Mizushima Plant

Established in 1969. Mizushima Plant has facilities for extracting butadiene monomer from C_4 fractions* and facilities for extracting isoprene monomer from C_5 fractions*, and produces various related products using C_5 fractions.

*C_4 and C_5 fractions: Hydrocarbon molecules containing four carbon atoms and five carbon atoms, respectively, created as byproducts of naphtha thermal cracking.

Main products

Isoprene rubbers, thermoplastic elastomers, petroleum resins, synthetic aromas, specialty plastics, isoprene monomer, butadiene monomer

ZEON

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CSR Promotion Department
Shin Marunouchi Center Building, 1-6-2 Marunouchi, Chiyoda-ku, Tokyo 100-8246, Japan
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