

## **Strengthen Business Structure then Create New Products**

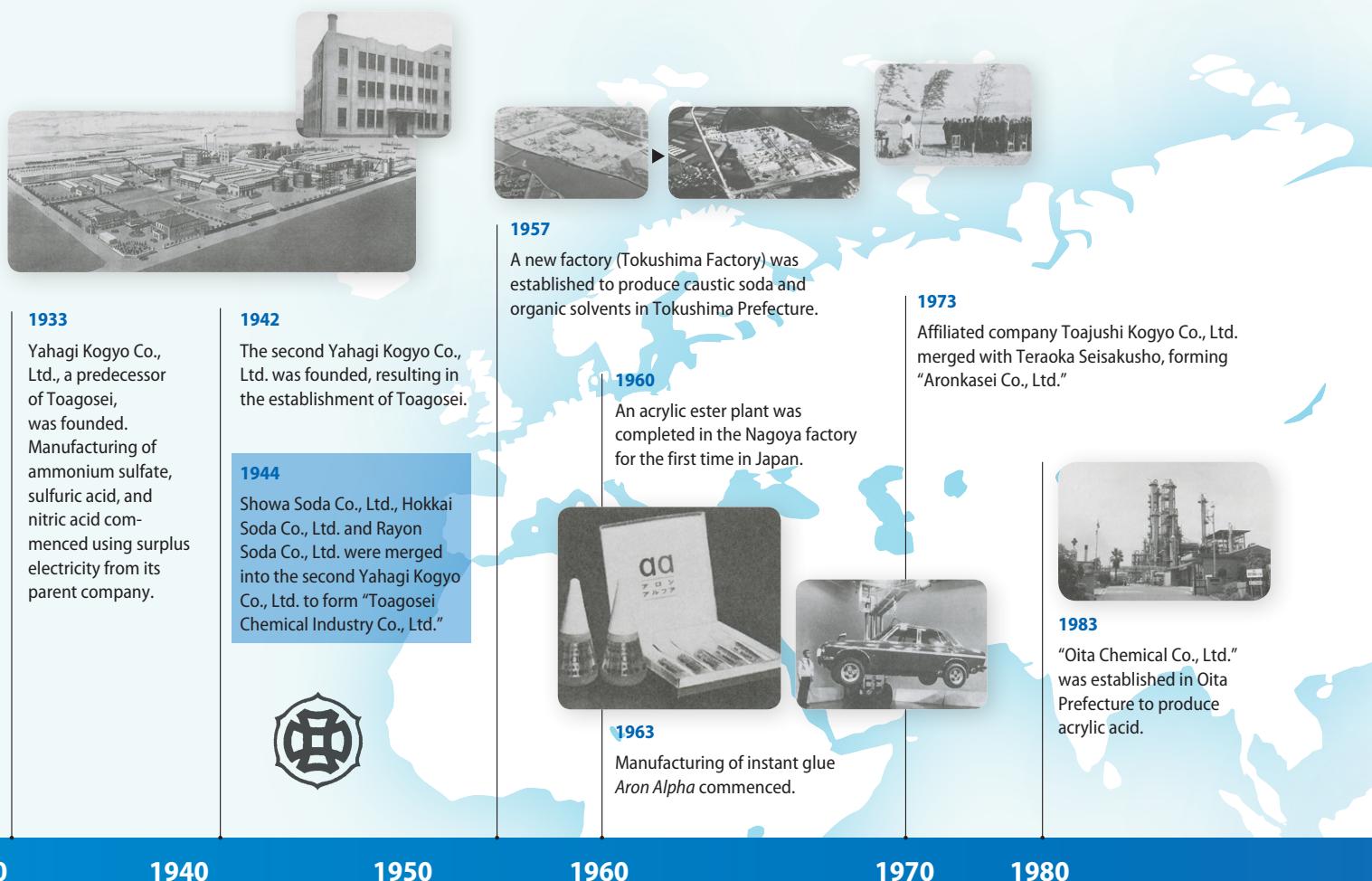


## Profile

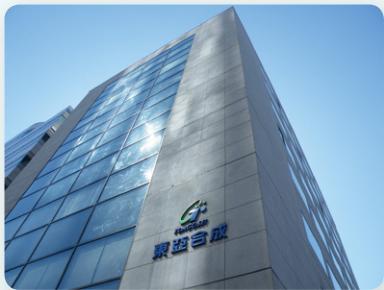
Since its establishment on March 31, 1942, Toagosei Co., Ltd. has continued to grow along with the whole chemical sector in Japan. Including the parent, Toagosei, the Group comprises 37 companies, engaged in four principal business domains, Commodity Chemicals, Acrylic Products, Specialty Chemicals and Plastics, each of which leverages its unique strengths to push out the frontiers in technological and product development.

As of December 2013, the Group's sales came to ¥151 billion and its workforce totaled 2,483, both on a consolidated basis.

Under its slogan "Sharing more happiness with more people through the chemical business," the Group manufactures and markets high value-added products on a global scale, from bases in Japan, Singapore, China, Taiwan, South Korea and the United States.



# Corporate History



Head Office



General Center of R&D



Monodukuri Center  
(Aronkasei Co., Ltd.)



#### 1991

"Institute for Advanced Sciences (formerly Tsukuba Research Laboratory)" was founded to develop new technology and products centered on life science.

#### 1994

Our company was renamed "Toagosei Co., Ltd." on our 50th anniversary.



#### 2001

The industrial gas business was spun off, and its operation was commenced as "Toa Techno-Gas Co., Ltd."

#### 2003

Kyoei Shoji Co., Ltd. and Sansei Shoji Co., Ltd. merged, resulting in a company named "TG Corporation."

#### 2006

The polymer flocculant business was split off and MT AquaPolymer, Inc. was established as a joint venture with Mitsui Chemicals Inc.

#### 2007

MT Ethylene Carbonate Co., Ltd. was established for manufacture of ethylene carbonate as a joint venture with Mitsui Chemicals Inc.

#### 2011

Aronkasei Co., Ltd. became a wholly owned subsidiary.

#### 2013

Tsurumi Soda Co., Ltd. and Nihon Junyaku Co., Ltd. were merged into Toagosei Co., Ltd.

Commercialization of the Gas-Diffusion Electrode Method, the world's first energy-saving technology.

1990

2000

2010

70th Anniversary

**1993**  
"Toagosei Hong Kong Limited" was established to market Aron Alpha in Hong Kong.

**1994**  
Our first overseas factory was established in Ohio, U.S.A. Filling and packaging of Aron Alpha (U.S. brand name: Krazy Glue) were commenced.



**1995**  
"Toagosei Asia Pte Ltd." was established in Singapore.

**1996**  
Production in China was commenced at "Toagosei (Zhuhai) Limited," a factory for filling and packaging Aron Alpha.

**1997**  
A facility for manufacturing acrylic acid and acrylic esters was completed in Singapore and its operation was commenced.

**2000**  
Toa-Jet Chemical Co., Ltd. and Taiwan Toagosei Co., Ltd. were established to manufacture and market UV-curable resin (Aronix) in Taiwan.

**2004**  
TOA-DIC Zhangjiagang Chemical Co., Ltd." was established in Zhangjiagang, Jiangsu Province in China for manufacturing and marketing of UV-curable resin.

Singapore Acrylic Ester Pte Ltd. became a wholly-owned subsidiary, renamed "Toagosei Singapore Pte Ltd."



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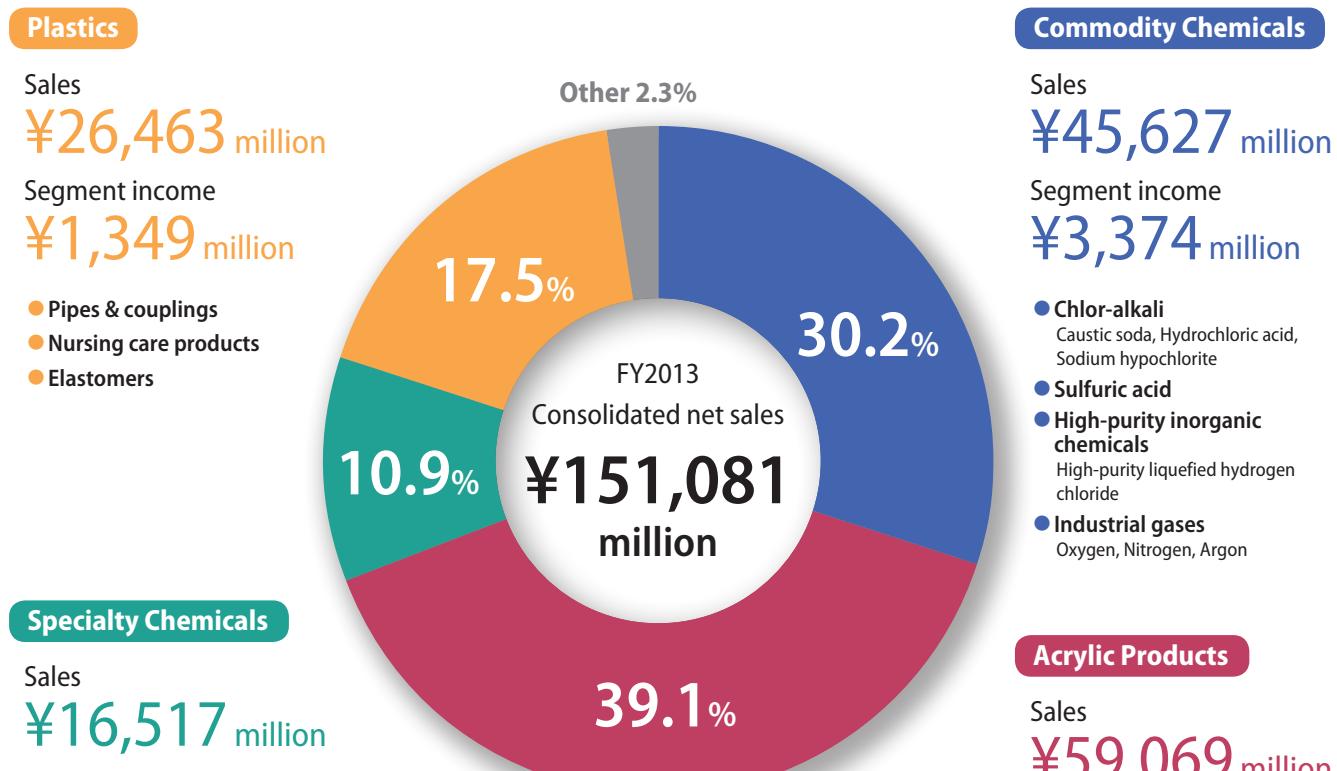
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The catch phrase on the cover, "Strengthen Business Structure then Create New Products" expresses the core concept behind our medium-term management plan for fiscal 2014 – 2016. It was printed using ink made from our popular UV-curable acrylic product Aronix.

# At a glance

**Business Domains:** Toagosei conducts business in four business domains—  
**Commodity Chemicals, Acrylic Products, Specialty Chemicals, Plastics.**



Establishment

1942

Total assets

¥193,086 million

Number of  
consolidated subsidiaries

38

## Plastics

Sales  
¥26,463 million

Segment income  
¥1,349 million

- Pipes & couplings
- Nursing care products
- Elastomers

## Specialty Chemicals

Sales  
¥16,517 million

Segment income  
¥3,290 million

### Functional Chemicals

- Adhesives  
Instant adhesive Aron Alpha,  
Functional adhesive Aron Mighty
- Products for construction and  
civil engineering

### Advanced Chemicals

- Amenity care materials  
Silver-based inorganic antimicrobial agent Novaron,  
Inorganic-organic hybrid antifungal agent Cavinon
- Electronics materials  
Ethylene carbonate

## Commodity Chemicals

Sales  
¥45,627 million

Segment income  
¥3,374 million

- Chlor-alkali  
Caustic soda, Hydrochloric acid,  
Sodium hypochlorite
- Sulfuric acid
- High-purity inorganic  
chemicals  
High-purity liquefied hydrogen  
chloride
- Industrial gases  
Oxygen, Nitrogen, Argon

## Acrylic Products

Sales  
¥59,069 million

Segment income  
¥6,274 million

- Acrylic monomers
- Acrylic polymers
- Polymer flocculants
- UV-curable resins

# Our Business Activities

## Commodity Chemicals

→ P10



## Acrylic Products

→ P12



### Segment Sales



30.2 %

In our commodity chemicals business, which boasts the longest history of all operations in the Toagosei Group, we produce caustic soda and chlorine through electrolysis of salt water. Chlorine is then combined with other elements to produce a variety of inorganic chemical products such as hydrochloric acid, and sodium hypochlorite which is used to sterilize tap water. We also manufacture high-purity inorganic chemical products, which are employed in the production of such leading-edge industrial products as semiconductors and liquid crystals. In this way, we work to develop new products that match society's ever-evolving needs.

### Segment Sales



39.1 %

The acrylic products business is one of the core operations of the Toagosei Group, and Group enterprises within Japan and overseas are working together to strengthen our business base in this field. Our aim is to expand our operations in acrylic derivatives—the downstream portion of our acrylic chain—while also strengthening our business base in the Group's acrylic acid operations, which is the initiation point of the chain, by enabling the production of cost-competitive derivatives. We boast one of the world's highest levels of technological expertise in the field of UV-curable resins, and our products are being manufactured in Japan, Taiwan, and China and marketed all around the globe under the brand name Aronix.

## Specialty Chemicals



→ P14

## Plastics



→ P18

### Segment Sales



10.9 %

### Segment Sales



17.5 %

#### Functional Chemicals

We manufacture a wide range of adhesives offering unique features and developed by our proprietary technologies. In addition to instant glues, we offer hot melt, light curable, and reactive adhesives, meeting user needs in the electronics and automotive industries, and many other fields. Our environment-friendly products for architectural and civil engineering use help improve the longevity of buildings and other structures.

#### Advanced Chemicals

Our amenity care materials feature a variety of functions, including superior heat resistance and safety, in order to support people's comfortable daily lifestyles. We have also developed a next-generation series of hybrid electronics materials with high functionality and high purity, and offer customized solutions to suit each user's needs.

In 1951, Aronkasei Co., Ltd. became the first Japanese enterprise to launch rigid PVC piping products on the market, under the brand name *Aron Pipe*. Since then, Aronkasei has leveraged its original *monodukuri* (excellence in manufacturing) capabilities to meet society's needs, responding to new developments from one generation to the next. In addition to the plastics processing technologies we have developed and perfected over many years, we also deploy our staff's expertise in the properties of materials, as well as their know-how required for the practical commercialization of products, enabling the Company to make important contributions to society in a wide field from daily life through infrastructure construction and maintenance to urban development.

# Interview with the President

## Q1

### Market environment in 2013 and business performance

**A** The Japanese economy experienced a gradual domestic-led recovery during 2013. Along with a rise in public investment, this was attributable to improved consumer confidence that reflected the weak yen and high stock prices resulting from the Abe government's economic policies. On the other hand, despite indications of improving performance for certain exporting companies accompanying the weak yen and the rebounding U.S. economy, overseas demand remained uncertain because of a definite slowdown of growth in emerging countries.

The business environment surrounding the Toagosei Group remained unpredictable. This is due to an overall increase in fuel and raw material prices caused by the weak yen and high crude oil prices as well as disparities among business segments regarding the extent of recovery in demand and progress made in price revisions.

Under these circumstances, the Group is working to secure profits by thoroughly reducing costs and implementing detailed sales policies that address the business conditions surrounding each product.

*Futoshi Hashimoto*

President  
Futoshi Hashimoto



# Q2

## The medium-term management plan

### "All TOA 2016: Strengthen Business Structure then Create New Products"

(A) In order to shift to a business structure able to stably ensure high earnings levels in any economic environment, the Toagosei Group formulated the new medium-term management plan, "All TOA 2016: Strengthen Business Structure then Create New Products," which will be implemented over a three-year period from 2014 to 2016.

Under the new plan, we will focus on strategies to "strengthen" the Group's business structure to boost cost competitiveness by thoroughly improving the efficiency

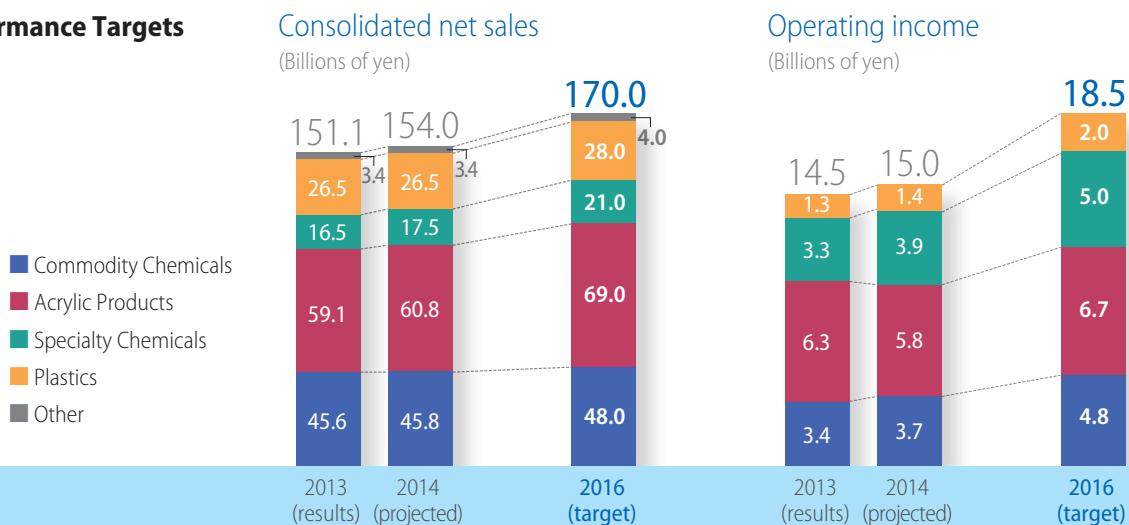
of existing businesses as well as "create" new businesses able to generate high profitability by accelerating new product development without being influenced by the external environment of the economy.

We aim to achieve consolidated performance targets of ¥170.0 billion in net sales, ¥18.5 billion in operating income, and an operating income ratio of 11% in 2016 by aggressively promoting the growth strategies outlined in the new plan.

#### 1 Theme

## "Strengthen Business Structure then Create New Products"

#### 2 Performance Targets



## 2016 Targets

Consolidated net sales  
¥170.0 billion

Operating income  
¥18.5 billion

Operating income ratio  
11 %

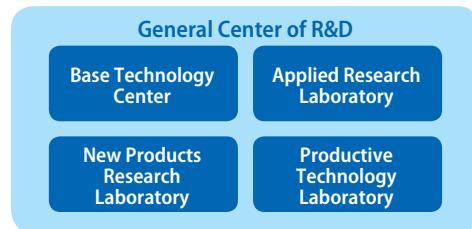
Net income  
¥13.0 billion

### 3 Overview of Growth Strategies

#### 1. Next-generation product development

We will focus on developing new products in areas expected to grow in the future, including food, water, healthcare, the environment, energy, and social infrastructure. To this end, we will revise the Group's research structure, which was previously separated by department, by building a consistent management system at the General Center of R&D, extending from basic research to applied research, product development, and production technology development. This initiative will enable us to maintain a cross-segment system capable of rapidly dispatching researchers in key fields along with enhancing personnel training to improve the creativity and skills of each researcher.

The General Center of R&D's Consistent Management



#### 2. Strengthening and qualitatively transformation of existing business production and sales systems

##### a Production Division

In the key electrolysis and acrylic segments, promote project team-based operational reforms while working to reduce costs and improve productivity by introducing innovative manufacturing technologies

##### b Sales Division

Improve earnings by steadily implementing such measures as increasing customers through enhancements in the quality and quantity of sales activities; gathering information on customer needs; and revising prices in a timely manner

##### c Overseas Division

Work to optimize production systems and strengthen sales systems at overseas bases; promote new product development in North America; and enhance bases in Asia to further augment competitiveness in that region

#### 3. Qualitative transformation to a more attractive company

Promote a qualitative transformation of the corporate culture to motivate employees to take on the challenge of implementing positive innovations by upgrading employment conditions, such as creating opportunities for senior employees and revising wage levels

2-a

##### Innovative manufacturing technologies

(Photo left) In the past, the company manufactured acrylic acid using two reactors, but the installation of an integrated-type reactor reduced this to one. Changing the manufacturing process raised production efficiency and improved competitiveness.

(Photo right) Electrolysis machine using the gas diffusion electrode method that reduces electricity consumption by two-thirds compared to conventional machines



2-C

##### New product development in North America

Krazy Glue: Product development that meets user needs



## **Q3**

### **Dividend payments for 2013 and policy on shareholder returns**

**A** Our dividend payment policy is based on the principle of providing shareholders with a stable rate of returns on their investment. In determining the amount of dividend to be paid, we keep in mind the importance of maintaining a sound financial position, while at the same time taking into account the Group's business performance over the past several years and

the need to set aside adequate funds for future capital investment plans and to pay R&D expenses. On this basis, we aim to maintain a stable annual dividend of ¥10 per share.

Regarding the allocation of profits for the 2013 business year, we have decided to pay a term-end per-share dividend of ¥5, for an annual dividend of ¥10 per share.

## **Q4**

### **Business performance prospects for 2014**

**A** The business outlook over the near future is forecast to remain on a gradual improvement trend, underpinned by government economic policies aimed at increasing consumption tax rates as well as economic recoveries in the United States and other advanced countries. Nevertheless, conditions in the chemical industry are expected to remain uncertain amid rising fuel and raw material prices. In light of this, the Toagosei Group will take steps to secure earnings by steadily implementing growth strategies under

the new medium-term management plan, "All TOA 2016: Strengthen Business Structure then Create New Products," which was launched this year. We project net sales, operating income, and net income for 2014 at roughly the same levels as in 2013.

***We will evolve into a business able  
to grow while generating profits***

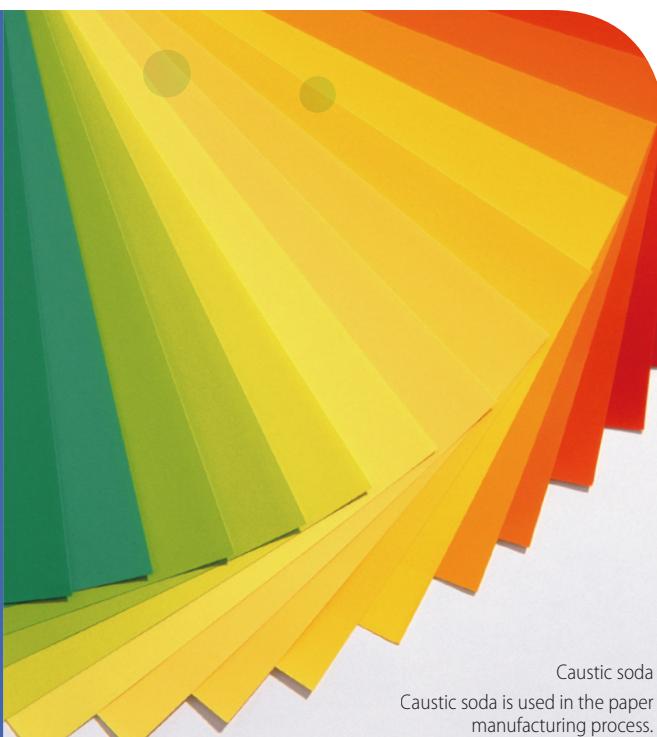


## Overview by Business Segment

# Commodity Chemicals



Hisashi Hara  
Executive Officer,  
General Manager,  
Commodity Chemicals  
Department



Caustic soda  
Caustic soda is used in the paper manufacturing process.

### Medium-term Management Plan Growth Strategies

#### Key Business Segment Action Plans

**Strengthen foundation of existing businesses and increase earnings from high-purity inorganic products**

- Build optimal production systems at the three plants in Nagoya, Yokohama and Tokushima
- Strengthen competitiveness and enhance electrolysis operations by introducing gas-diffusion electrode method
- Expand business by augmenting high-purity inorganic products



Caustic potash

It is used in a broad range of applications, from alkaline batteries and pharmaceuticals to cosmetics, various potassium derivatives, detergents, and food additives.



Iron (III) chloride solution

It is used in electronics industries for etching printed wiring boards and lead frames and other applications.



Sulfuric acid has a wide spectrum of demand as a basic material and it is also used as a raw material in fertilizers.

## 2013 Review — Third Year Achievements of Medium-term Management Plan

The Toagosei Group's commodity chemicals business comprises chlor-alkali and sulfuric acid products, high-purity products, and industrial gases. Under the current medium-term management plan, we have set ourselves the target of aggressively developing and expanding the high-purity products business as a profit generator, while ensuring stable performance in the other more mature, established businesses of chlor-alkali and sulfuric acid products and industrial gases.

In 2013, sales and profits in the commodity chemicals

business were both below initial targets due to weak demand for general-purpose products, and high fuel and raw material prices. Despite ongoing sluggishness in internal demand in the key electronics materials field—including semiconductors and LCDs—sales and profits for high-purity products remained nearly on target thanks to an upswing in exports.

We are steadily implementing initiatives to strengthen strategic businesses, primarily high-purity products, and expect them to bear fruit going forward.

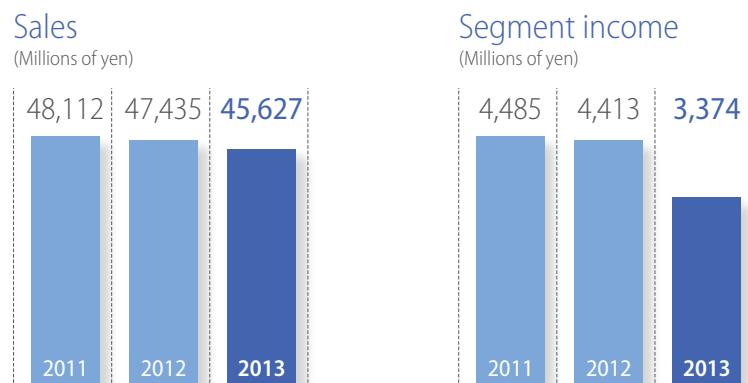
## New Medium-Term Management Plan Initiatives in 2014 (Issues to Be Addressed)

Tsurumi Soda Co., Ltd. was integrated with Toagosei in January 2013 and was repositioned as the Yokohama Plant. This deepened the level of integration in the chlor-alkali business, which is a core business in commodity chemicals. The next moves will be to fully integrate production, sales and technology, as well as optimize production activities at the three plants in Nagoya, Yokohama and Tokushima and realize efficient operations and sales. Our goal is to strengthen the position of the chlor-alkali business in the industry and increase earnings.

In the chlor-alkali business, we will invest in the business to strengthen its production base in order to achieve stable business profit. In particular, a gas-diffusion electrode method was introduced at the Tokushima Plant last year to reduce electricity costs. This is expected to enable significant cuts in electricity use. Looking ahead, we plan to gradually introduce this method to the Yokohama and Nagoya plants.

In the high-purity products business, we aim to further boost earnings. To this end, we will continue making strategic investments in high-purity liquefied hydrogen chloride to address rising demand from the semiconductor sector, mainly in East Asia; improve productivity; and establish a streamlined production, filling and shipping system. In high-purity agents, we will focus on promoting further increases in product purity and differentiation in existing businesses while enhancing the potential of sulfuric acid, caustic potash and other high-purity products.

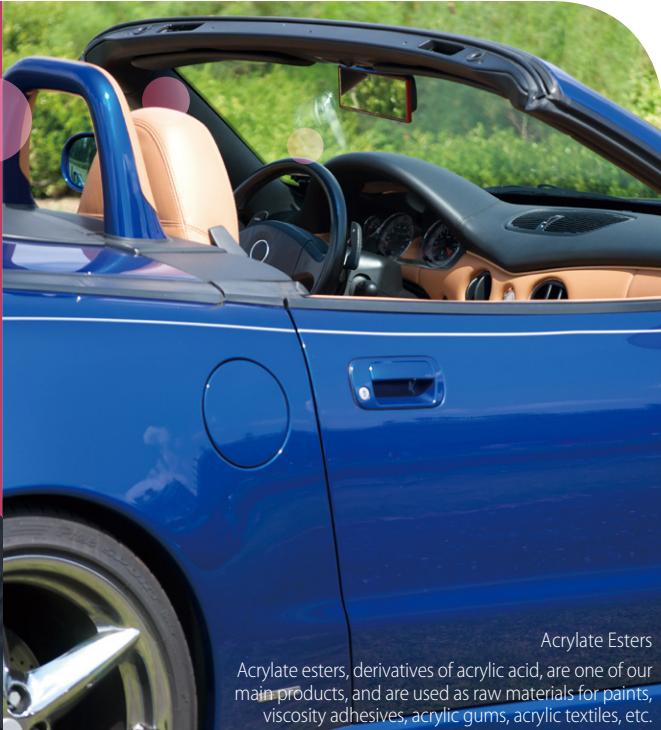
In the industrial gases business, we plan to become the most profitable industrial gas supplier in the Chubu (Nagoya) region by building a more efficient business model and stepping up marketing. We are also looking into upgrading that will enable us to build the state-of-the-art industrial gas facilities.



# Acrylic Products

Tatsumi Nonaka

Executive Officer,  
General Manager,  
Acrylic Products Department



Acrylate Esters

Acrylate esters, derivatives of acrylic acid, are one of our main products, and are used as raw materials for paints, viscosity adhesives, acrylic gums, acrylic textiles, etc.

## Medium-term Management Plan Growth Strategies

### Key Business Segment Action Plans

## Innovate upstream product businesses and develop new businesses in downstream fields

- Enable consistent profitability through monomer business innovation
- Develop new applications and maximize earnings in the polymer business  
Develop new products and reduce costs in the Aronix business
- Undertake new business development by concentrating human resources toward projects to strengthen the acrylic products business



Polymer flocculants are used in the treatment of wastewater.



Acrylic Polymers: Gelling agents are applicable in a wide range of fields, including pharmaceutical poultices, quasi-drugs like cooling sheets and packs, as well as cosmetics and other items.



UV-curable Resins: Aronix

UV-curable resins are used in various things around us, from printed materials to electronics materials.

## 2013 Review — Third Year Achievements of Medium-term Management Plan

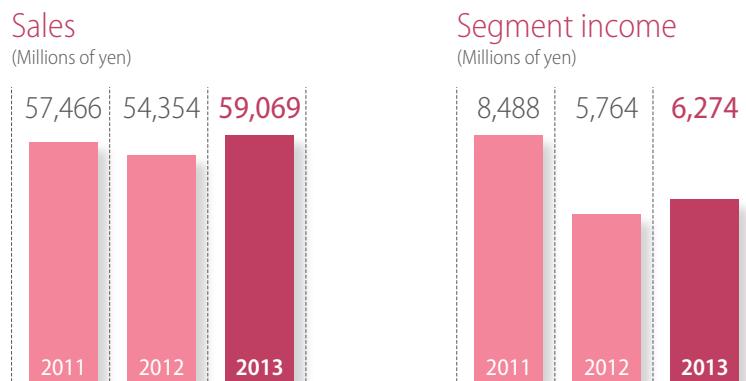
The acrylic products business is engaged in producing chemicals ranging from monomers, including acrylic acid — the starting point of the business — and acrylic ester, to downstream derivatives such as acrylic polymers and UV-curable resins (Aronix). In the monomer business, we continued to focus on the stable improvement of profits through the building of a new business model for production and sales. Further, Toagosei made steady progress in construction to increase acrylic acid production capacity at Oita Chemical Co., Ltd. Completed in January 2014, this extra capacity has boosted annual production from 60,000 tons to 140,000 tons. In the polymer business, we took active steps to raise productivity in order to boost

profitability and increase market share. At our operations in Singapore, we worked to secure profits from monomer products and actively expanded sales of water-soluble polymers. In the Aronix business, sales of some products in the electronics materials field declined. However, we took steps to improve existing products to conform to the regional characteristics of Japan, China and Taiwan as well as aggressively developed new products for advanced applications such as flat panel displays. Also, in order to expand demand for our acrylic products, we looked at new ways to strengthen our marketing infrastructure and examined the adoption of new technologies to boost profitability.

## New Medium-Term Management Plan Initiatives in 2014 (Issues to Be Addressed)

This spring, Toagosei boosted the annual production capacity of Oita Chemical Co., Ltd.'s acrylic acid facilities to 140,000 tons in order to further enhance its competitiveness across the entire acrylic chain, from upstream monomers to downstream functional polymers. In response, the monomer business will take steps to further increase profitability by creating a new business model to undertake domestic and overseas production and sales in tandem with the Company's Singapore base. In the polymer business, we will maximize the increase in acrylic acid production capacity. To this end, we plan to further expand sales of polymer products and enhance its manufacturing technology capabilities while also aggressively investing in the polymer business. Toagosei will also work to improve profitability by increasing the production efficiency of water-soluble polymer and emulsion product lineups, expanding into peripheral fields, and promoting the development of functional fine particles and other high-value-added products. In addition,

we plan to develop competitive new products to boost profitability in the flocculant business at MT AquaPolymer, Inc. and in the water-soluble polymer business in Singapore. In the Aronix business, we will leverage the strengths of our three production bases in Japan, China and Taiwan, focusing on developing chemical products in grades tailored to local needs. We will also work to expand sales by using innovative manufacturing technologies to develop other distinctive products. In the energy/environment and optics fields, we will work to strengthen downstream businesses and further improve profitability by creating demand for acrylic products that identify market needs from new perspectives and advance technological innovation. We will expand these downstream products, develop new manufacturing technologies, and aggressively roll out new competitive product lines in Asia while working to increase the profitability of the Group's acrylic chain.

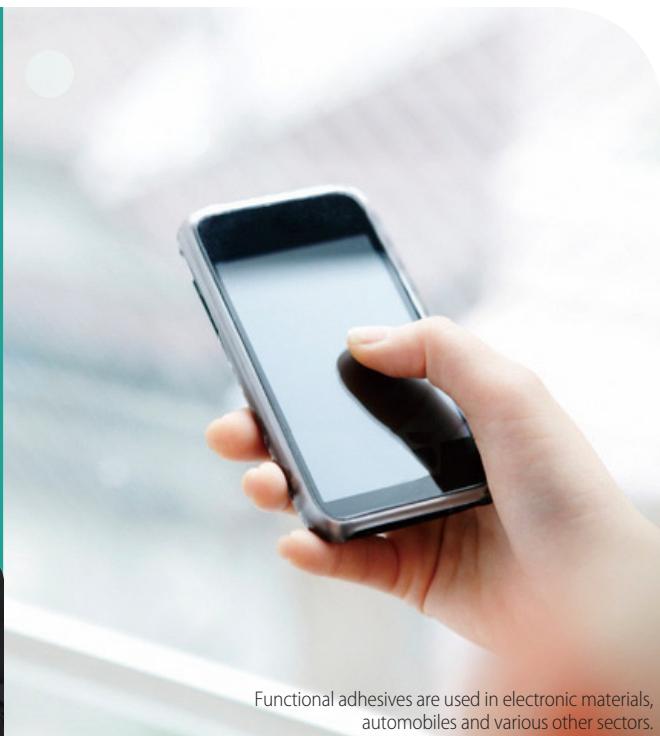


# Specialty Chemicals

## Functional Chemicals



Shin Takahashi  
Executive Officer,  
General Manager,  
Functional Chemicals  
Department



### Medium-term Management Plan Growth Strategies

#### Key Business Segment Action Plans

#### Develop new instant adhesives and expand high-value-added product businesses

- Launch new general-purpose instant adhesives in Japan and overseas and boost domestic share of industrial-purpose adhesives
- Stabilize earnings by developing new functional adhesives



Instant adhesive Krazy Glue



Products for Construction and Civil Engineering *Clear Wall*  
For improvement work for tiled exterior walls of multi-unit residential buildings and retail facilities

## 2013 Review — Third Year Achievements of Medium-term Management Plan

In adhesives, we achieved the goals set for 2013 and the medium-term management plan through higher sales of the new product, *Aron Alpha*, and functional adhesives for electronics materials used to make mobile devices.

The *Aron Alpha* brand of instant adhesives retained top share given its high level of quality. This was due to redoubled promotional activities, including marketing campaigns for *EXTRA GEL* (released in 2012) targeting retail outlets and advertisements placed in specialty magazines. In the United States, *Krazy Glue* maintained its top market share because of enhanced promotional activities based on TV commercials and the Internet. In China, we focused on marketing to convenience stores and Japanese mass retailers.

Despite sluggish performance in the area of housing materials, overall sales of functional adhesives were driven by increased sales of reactive type adhesives used in mobile devices and automobiles. In addition, we have restructured the industrial-purpose adhesive production system by completing the integration of Aron Ever-Grip Ltd.'s and the Takaoka Plant's production operations.

As a result, revenue and earnings in the adhesives business increased, which enabled us to achieve medium-term management plan targets.

In construction materials, despite achieving fiscal 2013 targets due to increased sales of construction repair materials, we were unable to reach the medium-term management plan targets for 2013. In construction repair materials, our focus on increasing sales of mainstay exterior wall and rooftop waterproofing materials, and tile coatings resulted in steady improvements in construction performance, which enabled us to exceed annual sales targets. However, despite recording peak sales of rooftop waterproofing materials that achieved the target set in the medium-term management plan for 2013, we fell short of the overall target for construction repair materials. This was due to the major impact of delays in the development of exterior wall waterproofing and tile coating materials.

In civil engineering, despite being unable to reach annual targets because of a drop in demand for grout-related products, sales were almost on par with medium-term management plan targets thanks to brisk shipments of *Aron Soil* for use in road construction.

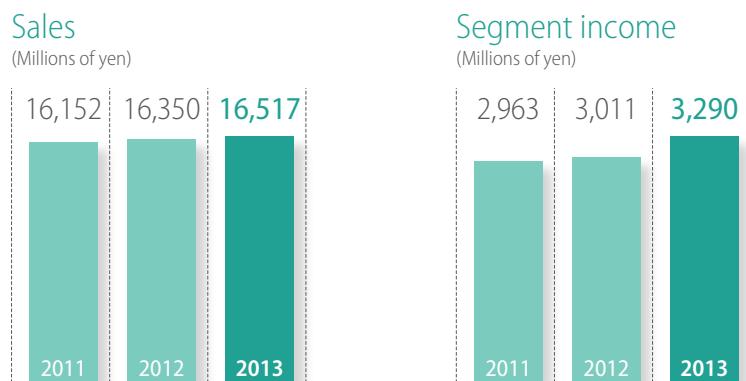
## New Medium-Term Management Plan Initiatives in 2014 (Issues to Be Addressed)

In adhesives, we will release new products on the heels of *EXTRA GEL* both in Japan and overseas to bolster the *Aron Alpha/Krazy Glue* brands and increase their market share. In order to create attractive new products, we will also deepen collaboration among Group companies in Japan, the United States and China by strengthening systems for developing adhesives, containers and related sales channels.

In functional adhesives, we will tap into new demand and promote ongoing business expansion to address the rapidly increasing functionality of electronic materials used in the automobile and telecommunication fields. Regarding adhesives

for housing materials resulting from the merger with Aron Ever-Grip Ltd., we will promote the development of environmentally sound products in an effort to expand this business while protecting the environment.

In construction materials, we aim to further increase sales of construction repair materials by switching to a more innovative marketing approach and restructuring the rooftop waterproof business. We also plan to expand into the civil engineering field while making a concerted effort to grow the construction materials business.



**Specialty Chemicals**

**Advanced Chemicals**

**Akira Kuriyama**  
Executive Officer,  
General Manager,  
Advanced Chemicals  
Department

Amenity care materials are additives that add functions such as antimicrobial, mold resistance, and deodorant to processed products, and are used in the field of amenity care.

## Medium-term Management Plan Growth Strategies

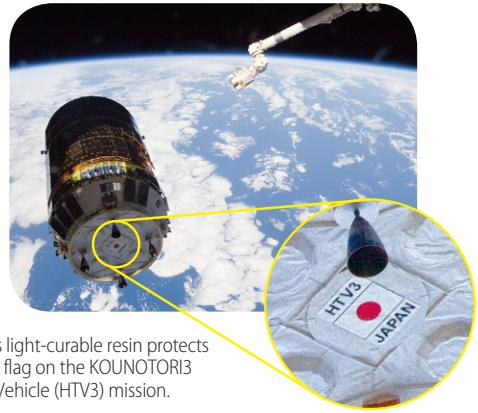
### Key Business Segment Action Plans

#### Develop new instant adhesives and expand high-value-added product businesses

- Promote downstream expansion and market development of amenity care materials



New Materials  
Silsesquioxane Derivatives  
(The SQ Series)



The SQ Series light-curable resin protects the Japanese flag on the KOUNOTORI3 H-II Transfer Vehicle (HTV3) mission.



Antimicrobial agents, deodorants, and other products can be used to coat or mix into products used in daily life to create comfortable spaces for living.

## 2013 Review — Third Year Achievements of Medium-term Management Plan

### Released advanced amenity care materials products and completed future-oriented infrastructure upgrading

We successfully developed and commenced sales at the end of 2013 of the advanced *KESMON MASK*. This new highly functional amenity-application materials product uses its characteristic chemical adsorption to deliver superior deodorizing performances in a wide array of industrial settings. Looking ahead, we will take steps to establish this product brand *KESMON* by accelerating the development of applications beyond use as an amenity care materials mask.

In manufacturing, we completed upgrades to zirconium phosphate compound production facilities at the Tokushima Factory, thereby strengthening our supply system. In continuing to focus on our production capabilities, we will channel energies toward streamlining operations and increasing efficiency going forward.

We strengthened our cost competitiveness in high-purity hexachlorodisilane (*HCD*) deposition materials for semiconductor insulating films by making ongoing improvements to manufacturing technology. Thanks to this and other initiatives, we have maintained our position as the world's leading manufacturer of *HCD*.

In ethylene carbonate (EC), one of the main materials for electrolytes used in lithium-ion secondary batteries for electric cars, personal computers, cell phones, and related devices, Toagosei established an EC manufacturing facility within the Osaka plant of its joint-venture partner Mitsui Chemicals, Inc. and a high-purity EC manufacturing facility in Nagoya. As a manufacturer of high-purity EC, we put in place a supply system to cope with the forecast growth in demand.

## New Medium-Term Management Plan Initiatives in 2014 (Issues to Be Addressed)

### Revamp amenity care materials products and accelerate downstream expansion

In light of the growing diversity of living environments, markets for amenity care materials products are expected to grow. In order to expand and strengthen our business foundation, we will create brands for target sustainable markets while working to retain customers.

In the new medium-term management plan launched in 2014, we will develop repeat-use applications focusing on deodorants and fungicides (the efficacy of which can be demonstrated), and promote expansion from the sale of agents to fabricated products, including masterbatch and dispersing liquids. In addition, we will rebuild the Advanced Chemicals business by promoting branding through the provision of consistent technological services, extending to usage advice and efficacy evaluation.

With an eye to accelerating the establishment of functional materials product brands that enable satisfaction based on demonstrable efficacy, we will accelerate the development of downstream products branding like *KESMON MASK* through collaboration with industrial product manufacturers to meet the needs of industry.

- (1) Retain steady customers by developing and establishing umbrella amenity brands
- (2) Revise sales methods and provide customers with easy-to-use products and services
- (3) Design and commercialize industrial amenity care products as part of an expansion of downstream products and develop new marketing methods (Internet, catalog sales, etc.)

### Strengthen the Foundation of the EC Business

We will strengthen differentiation with competitor products for the demand which is expected to increase in automotive LiB applications in the future.

# Plastics



Akira Yada  
President, Aronkasei Co., Ltd.



Anju brand nursing care products

## Medium-term Management Plan Growth Strategies

### Key Business Segment Action Plans

#### Rebuild piping equipment and expand nursing care products

- Rebuild manufacturing systems and undertake sweeping innovations to reduce costs
- Increase the development capability of the Anju brand of nursing care products and release differentiated products



Elastomers are used in a vast variety of fields ranging from automobile to electronic materials, Electric devices, foods and beverages, medical, toys, and miscellaneous goods.



PVC small-diameter chambers, manholes, and rigid PVC pipes



The first rigid PVC piping in Japan

Aronkasei Co., Ltd., a member of the Toagosei Group, succeeded in developing the first rigid PVC piping product in Japan, called Aran Pipe. Since then, they have been pioneers in the fields of piping equipment products with joints, chambers, and more.

## 2013 Review — Third Year Achievements of Medium-term Management Plan

In fiscal 2013, the final year of the medium-term management plan, the piping equipment business saw a rebound in sales in the second half mainly due to post-disaster reconstruction demand and an increase in housing starts accompanying rush demand in anticipation of the consumption tax rate hike. Nevertheless, rises in sales and profits remained modest and fell below targets due to an inability to shift increases raw materials prices towards sales prices. In the nursing care business, despite expectations of sales increases after streamlining underperforming and focusing on nursing care products, sales and profits were sluggish mainly because of intensifying sales competition in the industry and prices hikes the rise in raw material prices.

Looking at efforts aimed at returning Mikuni Plastics Co., Ltd. to profitability, an issue of considerable concern, we came close

to reaching initial sales and profits forecasts thanks to efforts to optimize business operations within the Group in 2011. As a result, we were successful in securing a move back into the black from 2012 onward.

Amid this downturn in performance, we pursued various innovations with the aim of improving development capability and productivity. These measures were implemented under the basic policy of strengthening Toagosei's *Monodukuri* (excellence in manufacturing) and are anticipated to contribute to further developments in the years ahead. In other manufacturing areas, we are promoting operational reforms in sales, factory and administrative divisions as well as improving the quality of operations and raising awareness in each division, all of which have led to major cost reductions.

## New Medium-Term Management Plan Initiatives in 2014 (Issues to Be Addressed)

Under the banner of "doing everything possible to realize the medium-term management plan, ALL TOA 2014," Toagosei's new plan has established a framework for achieving its goals by strengthening collaboration within the Company, among Group companies and with other industries to increase Toagosei's comprehensive strengths. Accordingly, we are raising the two critical issues: (1) "Rebuild manufacturing systems and undertake innovations to reduce costs in the piping equipment business" and (2) "Expand our business by entering new nursing care product fields and releasing differentiated products."

Starting with the piping equipment business, we will optimize related manufacturing items, capacity and facilities based on factory concepts of the future. We will also work to improve earnings by minimizing and eliminating underperforming products.

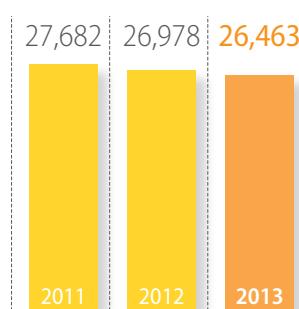
Next, in the nursing care business, we will take steps to expand into new fields by developing products extending beyond conventional excretion- and bathing-related items to

such new growth areas as rental nursing care products. In addition, we aim to achieve business growth by increasing brand power through the development of differentiated products that are ahead of the competition.

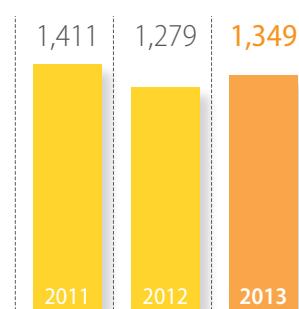
Building on the aforementioned initiatives, we will communicate closely with Toagosei Group companies to create new products that embody the technological know-how of the Group as a whole.

Finally, we recognize the critical need to maintain a sound and healthy position in order to achieve the measures outlined above. To this end, we will strengthen our compliance structure and promote CSR activities including hiring people with disabilities to ensure optimal work-life balance as well as harmonious co-existence with society. Through these means, we will endeavor to become a company in which the community and households can take immense pride.

Sales  
(Millions of yen)



Segment income  
(Millions of yen)



# Research & Development



General Center of R&D

## Changing the focus from providing facilities to reforming management



Toagosei's General Center of R&D laboratory spaces have switched from an organization-specific to a function-specific layout to boost coordination and competitiveness.

To facilitate communication and enhance issue resolution outcomes, Toagosei has removed inter-departmental barriers and consolidated disparate executive offices into a single room.

# R&D Strategy

We aim to develop high value added products as well as create new products and businesses.

At the Toagosei Group, developing high value added products as well as creating new products and businesses are listed among our mid-term management plan goals. In order to focus new product development in growth fields while accelerating product development in existing fields, we have revised our conventional organizational system for business units. Now, the General Center of Research & Development consistently manages everything from basic research to applied research, product development, and production technology development. This cross-divisional system can distribute researchers flexibly across crucial fields, while improving the creativity and skills of each researcher through robust human resources development.

The Toagosei is taking stock of its core technologies and the constituent elemental technologies, and aims to accelerate R&D by effectively assigning personnel specialized in each elemental technology in response to issues. In addition to defining the priority order and critical level of themes according to topics that are optimized for the entire organization instead of according to section or division priorities, we efficiently conduct R&D by spreading product development, elemental technologies, and other fields across multiple

business sections and divisions.

In research and development, we need to leverage our unique strengths to identify the portfolio of businesses and technologies that we want to have in the next ten or twenty years, working as pioneers to go beyond merely providing "materials" to making "functions" that offer excellent productivity and convenience. With the group of technologies that make up our core competencies (the core power of our group that allows us to provide customers with unique values that cannot be imitated by other companies), we are breaking ground in new fields, and pushing product development based on exploratory research, specialized technologies, and more, to create new technologies and functions. We will continue to enter new business fields by conducting technology development.



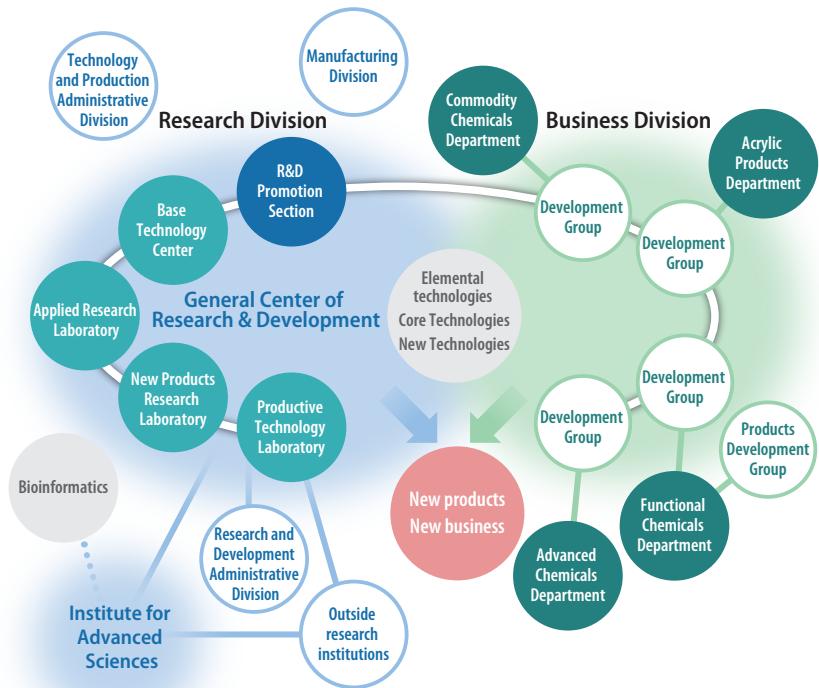
In the laboratory

# R&D System

At Toagosei, in order to accelerate the development of new next-generation products, we have Base Technology Center, Applied Research Laboratory, New Products Research Laboratory, and Productive Technology Laboratory in our General Center of Research & Development, and have established a consistent R&D system from basic research to applied research, product development, and production technology development.

In addition to organizing and clarifying the core technologies and their elemental technologies, we develop original products that are linked directly to the needs of the user, as well as integrate those elemental technologies with new ones.

Since our General Center of Research & Development is situated on the site adjacent to our Nagoya Plant, we have strengthened cooperation between the R&D, production technology, and production departments.



# Corporate Social Responsibility

## Toagosei aims to maintain the public's trust through the fulfillment of its social responsibilities as a chemical manufacturer, and achieve sustainable growth as a Group

The corporate ethical stance of the Toagosei Group is encapsulated in our slogan: "Sharing more happiness with more people through the chemical business." In line with the spirit of this slogan, we carry out CSR activities on a comprehensive Group-wide basis.

To comprehensively monitor the implementation status of CSR activities in each Group company and in each business, and to improve those activities, the Toagosei Group has established the Group CSR Committee, which rigorously promotes all Group CSR activities by conducting routine audits.

### Management focused on the interests of stakeholders

At Toagosei, we pursue our business operations with a strong emphasis on relationships with our customers, shareholders, employees, the communities in which we operate, and all other stakeholders. In all aspects of business we aim to realize an optimal balance between profitability, social contribution, and protection of the environment.

### Rigorous compliance

We have established an in-house system to ensure a continued focus on compliance, and are conducting compliance educational programs.

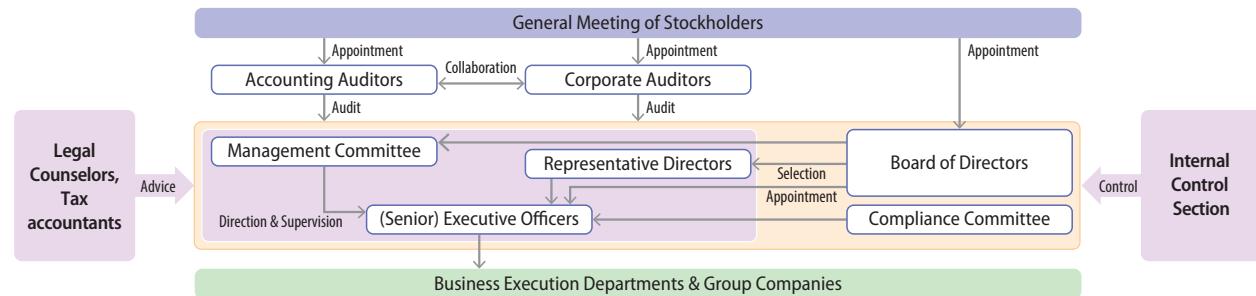
- The reviewing and revision of the Toagosei Group Code of Conduct and the Toagosei Group Manual of Behavioral Standards
- Monitoring by the Compliance Committee
- Installation of the whistleblower hotline systems for reporting suspected instances of illegal or unethical conduct
- Regular training of new employees, mid-career employees, and new managerial staff

### Systems for internal control and corporate governance

Toagosei has created effective systems for internal control and corporate governance to enable fast and precise response to dramatic changes in the business environment, and to ensure fair and transparent management. Measures taken thus far include the following.

- Introduction of executive officer system
- Participation in the management by outside directors
- Establishment of Internal Control Section
- Establishment of Corporate Auditor Section to assist corporate auditors

#### Corporate Governance System



## Risk management

The Toagosei Group, learned a lesson from the Great East Japan Earthquake of fiscal 2011, rebuilt its risk management system.

### ● Establishment of Risk Management Committee

We established a Risk Management Committee as a mechanism for the routine identification and assessment of potential risks. Based upon this, risk countermeasures are formulated and the status of those countermeasures is checked.

#### Potential risks

- Natural disaster risk
- Environmental and safety risk
- Financial risk
- Legal risk
- Geopolitical risk
- Infectious disease risk
- Product risk
- Market risk
- Personnel and labor risk
- Other external environment-related risks

### ● Response when facing a crisis situation

We reexamined our various rules and regulations that set forth the specific steps to take when faced with a crisis situation and introduced a system that verifies employee safety via mobile device.



Comprehensive emergency-preparedness drill (Nagoya plant)

## Responsible Care (RC) activities

In order to steadily pursue initiatives to ensure safety and protect the environment as a chemical company, the Toagosei Group conducts Responsible Care (RC) activities under basic policies for RC.

### Basic policies for RC

The Toagosei Group is committed to ensuring the safety of its products, as well as workforce safety and hygiene, and to reducing the impact on the environment of these products and their manufacturing processes at all stages from development through use to final disposal. By these means, the Group raises its reputation for trustworthiness among both its customers and society at large.



### What is RC?

Responsible Care is an activity wherein companies that handle chemical substances voluntarily communicate to society the results of their efforts and activities to ensure the protection of the environment, safety, and health at all stages of the product lifecycle, from development, production, and distribution, to use, final consumption, and disposal. RC activities are indispensable for the harmonious development of chemical companies with society.

## Efforts to reduce our environmental impact

### ● Prevention of global warming

We are switching to low-emission fuels and installing energy-efficient equipment as we pursue our goal of reducing CO<sub>2</sub> emissions.

### ● Reduction of industrial waste

We thoroughly separate and recycle waste at each of our operating locations, and are accordingly taking steps to recycle waste plastics toward achieving our zero-landfill goal for the entire Group.

### ● Reduction of emissions of substances harmful to the environment

We are working to reduce volumes of emissions of substances subject to Pollutant Release and Transfer Register (PRTR) assessment by Japan Chemical Industry Association.

## Training and recruitment

The Toagosei Group ensures fairness in human rights in recruitment, job assignments, and the handling of personnel. In addition to conducting a variety of education and training programs to develop human resources, we have introduced an incentive system for personnel improvement.

### Major training activities

- New employee training
- Training in the second, third, and fourth years after entering the company
- Mid-career employee training

- Foreman training
- Management training  
(new managerial staff training)
- New sales staff training
- Skill improvement courses for production

- technology and engineering staff
- Skill improvement courses for R&D staff
- Quality engineering courses
- Intellectual property courses
- Other courses

## Social contribution activities

### Development of earth and human-friendly technologies and products

#### Creative Production to Save Power: Electrolysis facility using gas diffusion electrode method

Since the First Commitment Period of the Kyoto Protocol in 2008, Japan has worked on global warming countermeasures to restrict carbon dioxide (CO<sub>2</sub>) emissions. Yet the shutdown of the country's nuclear power plants due to the Great East Japan Earthquake in 2011 has recently posed dire circumstances for our nation's power as power companies demand power conservation and raise prices. While our company, which uses brine electrolysis technology to produce caustic soda, chlorine and other products indispensable to industry and daily life, continues to serve its responsibility to supply products under these circumstances, we have proactively worked on developing and industrializing an electrolysis facility that runs on the gas diffusion electrode method in an aim to save energy by cutting power used for electrolysis.

This innovative technology produces caustic soda alone without producing hydrogen, and can reduce power consumption during electrolysis by up to approximately two-thirds of conventional methods. After joint research with the Japan Soda Industry Association, we conducted verification tests with Kaneka Corporation and obtained positive results, which led us to install the facility for our Tokushima Plant in July 2013.

From installing this technology, we expect to strengthen our competitiveness in the electrolysis business and we will be considering further installation in our Tokushima Plant as well as the Nagoya and Yokohama Plants.

#### CSR Efforts Overseas: Toagosei America developing and distributing products and services that meet local demands

Aron Alpha, a long-popular brand of instant glue, is distributed in the United States under the name Krazy Glue and boasts a leading share of the market. Toagosei America fills and packages its original solution that it procures from Japan to produce Krazy Glue.

Krazy Glue is most often used in the US for do-it-yourself, home carpentry work, with the average amount applied per use amounting to several times that in Japan. Its primary line in Japan is the two-gram product, but high-volume products such as a 20-gram version sell well in the US. To quickly satisfy such locally unique demand, we develop and improve on packaging materials locally in order to deliver products with better usability to our customers.

We also conduct focus surveys that directly elicit customer comments about the product in order to understand local needs and identify latent demand. The Color Change feature that gives the glue color to show where it was applied, but fades when the glue solidifies, comes from customer feedback we received on ways to make the product easier to use.



### Coexisting with the local community

#### Assisting in efforts to recover from the earthquake

Ever since the Great East Japan Earthquake, our Group has offered local contribution actions that include donations of Aron Pipe for use in wastewater facilities, masks containing the antimicrobial Novaron, and relief money, while sponsoring festivals and offering cooperation from various aspects in the affected region's efforts to return to pre-earthquake conditions.

As another component of these initiatives, we have recently donated a minibus to Hironomachi in Fukushima Prefecture, where our plant is located. The minibus is playing diverse roles today, serving residents' daily transportation needs as their local bus and preschool bus.



Donating a bus to Hironomachi, Fukushima Prefecture, to assist in the recovery efforts. (Hirono Plant)

## Environmental activities data

The material balances in the Toagosei Group's manufacturing activities are shown below. The figures shown cover companies involved in manufacturing over the one-year period from January 1 to December 31, 2013.

### INPUT

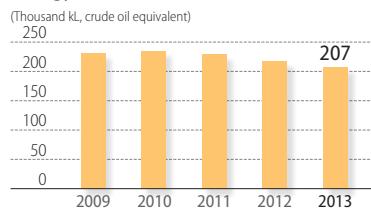
#### Energy (Crude oil equivalent)

Toagosei Group	207
Energy (Thousand kL)	

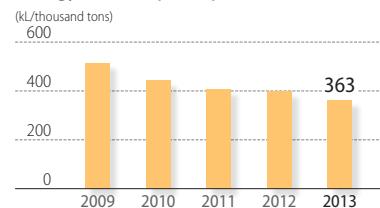
#### Water

Toagosei Group	55
Water consumption (Million m <sup>3</sup> )	

#### Energy



#### Energy consumption per base unit

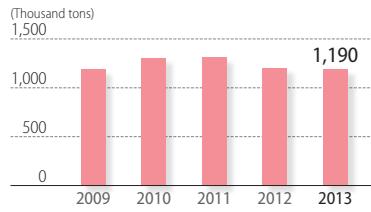


### Production base

#### Production volume

Toagosei Group	1,190
Production volume (Thousand tons)	

#### Production volume

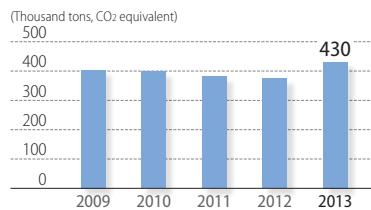


### OUTPUT

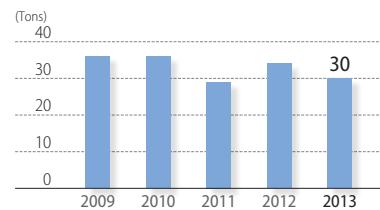
#### Air pollutant emissions

Toagosei Group	430
CO <sub>2</sub> Emission (Thousand tons, CO <sub>2</sub> equivalent)	
SOx Emission (Tons)	30
NOx Emission (Tons)	81
Soot and dust (Tons)	19

#### CO<sub>2</sub> Emission



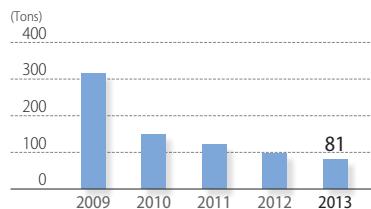
#### SOx Emission



#### Effluent volume

Toagosei Group	41
Total effluent volume (Million m <sup>3</sup> )	
COD (Tons)	86
Total nitrogen (Tons)	22
Total phosphorus (Tons)	1.0

#### NOx Emission



#### Total effluent volume



# Board of Directors and Corporate Auditors



Nobuhiro  
Ishikawa

Kazuaki  
Nakagawa

Ken  
Ozeki

Katsutoshi  
Yamada

Akihiko  
Yamadera

Futoshi  
Hashimoto

Souichi  
Nomura

Mikishi  
Takamura

Shinichi  
Sugiura

Eiichi  
Takizawa

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**Chairman** Akihiko Yamadera

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**President** Futoshi Hashimoto

---

**Directors**  
Katsutoshi Yamada  
Souichi Nomura  
Ken Ozeki  
Mikishi Takamura  
Kazuaki Nakagawa  
Shinichi Sugiura  
Nobuhiro Ishikawa  
Eiichi Takizawa\*

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**Corporate Auditors**  
Kunio Sato (Standing)  
Shou Sato\*\*  
Ryoji Miura\*\*  
Kazuo Hara\*\*

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**Executive Officers** Souji Hattori

Akira Komine  
Akira Kuriyama  
Hideo Kato  
Tatsumi Nonaka  
Hidemi Nagano  
Tomio Kanbayashi  
Hisashi Hara  
Moriyuki Kenjou  
Akio Sato  
Shin Takahashi  
Hisao Honma  
Hiroshi Inukai  
Yoshifumi Kawaura  
Ryosuke Fujiwara

\* Outside Director    \*\* Outside Corporate Auditor

(As of April 1, 2014)

# Financial Section

## Five-Year Selected Data

Toagosei Co., Ltd. and Consolidated Subsidiaries

Millions of yen (except per-share data)

Years ended December 31	2013	2012	2011	2010	2009
<b>For the fiscal year:</b>					
Net sales					
Net sales	<b>¥151,081</b>	¥148,203	¥153,007	¥153,779	¥140,033
Income before income taxes and minority interests	<b>14,731</b>	14,518	18,992	17,917	7,205
Net income	<b>9,605</b>	9,699	13,000	13,133	3,541
<b>Per-share data:</b>					
Per share of common stock:					
Net income	<b>36.44</b>	36.79	51.00	52.05	13.85
Cash dividends applicable to the year	<b>10.00</b>	10.00	10.00	9.00	6.00
<b>At year-end:</b>					
Total assets	<b>193,086</b>	181,451	171,046	173,847	161,609
Net worth (Note)	<b>143,722</b>	132,074	123,826	110,283	99,449
Number of employees	<b>2,483</b>	2,509	2,534	2,533	2,561

Note: Net worth refers to the amount of net assets after deduction of minority interests.

# Management's Discussion & Analysis

## Overview of Fiscal 2013

During the reporting term (January 1 to December 31, 2013), the Japanese economy experienced a gradual domestic-led recovery. Along with a rise in public investment, this was attributable to improved consumer confidence that reflected the weak yen and high stock prices resulting from the Abe government's economic policies. On the other hand, despite indications of improving performance for certain exporting companies accompanying the weak yen and the rebounding U.S. economy, overseas demand remained uncertain because of a definite slowdown of growth in emerging countries.

The business environment surrounding the Toagosei Group remained unpredictable. This is due to an overall increase in fuel and raw material prices caused by the weak yen and high crude oil prices as well as disparities among business segments regarding the extent of recovery in demand and progress made in price revisions.

Under these circumstances, the Group is working to secure profits by thoroughly reducing costs and implementing detailed sales policies that address the business conditions surrounding each product.

As a result, net sales in the reporting term increased 1.9% year on year on a consolidated basis to ¥151,081 million (\$1,433 million), operating income decreased 0.6% to ¥14,501 million (\$137 million), and net income declined 1.0% to ¥9,605 million (\$91 million).

## Sales by Segment

### Commodity Chemicals

In Commodity Chemicals, sales volumes of caustic soda, inorganic chlorides and industrial gasses were weak due to sluggish overall demand. High-purity products experienced weak domestic demand that caused sales to remain unchanged from the previous fiscal year, despite brisk exports centered on semiconductor applications. In spite of sluggish demand at the beginning of the year, sales of sulfuric acid were on par with the previous fiscal year due to an overall recovery throughout fiscal 2013.

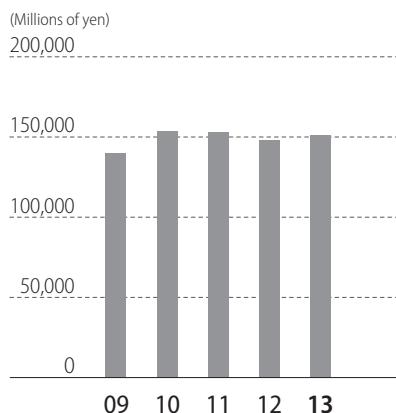
As a result, sales in this segment decreased 3.8% year on year to ¥45,627 million. Segment income fell 23.5% to ¥3,374 million due to the decreases in caustic soda and inorganic chloride sales volumes as well as deteriorating earnings caused by higher fuel and raw material prices, beginning with electricity.

### Acrylic Products

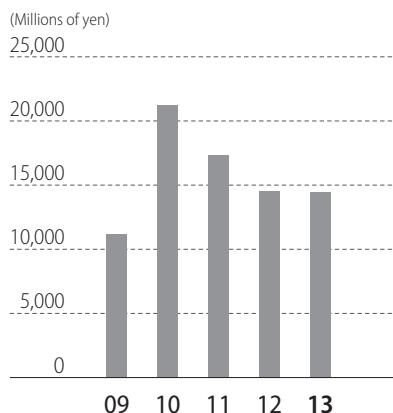
Sales of acrylic acid, acrylic esters and acrylic polymers remained firm thanks to an increase in sales volumes fueled by domestic buyers. Sales of polymer flocculants and UV-curable resins were weak as a result of lower sales volumes caused by stagnant overall demand.

As a result, sales in this segment increased 8.7% year on year to ¥59,069 million. Segment income rose 8.8% to ¥6,274 million owing to higher sales volumes of acrylic esters and acrylic polymers along with improved earnings that reflected efforts to revise product prices.

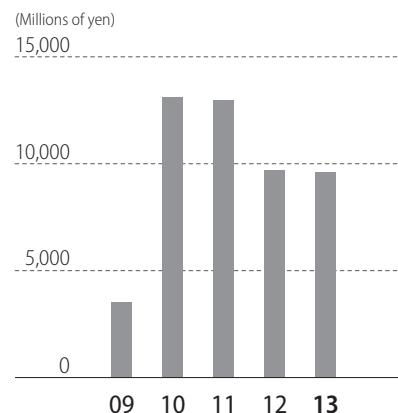
### Net sales



### Operating income



### Net income



### **Specialty Chemicals**

Adhesive sales were strong thanks to steady demand for both consumer-use and industrial-use instant adhesives as well as brisk demand for functional adhesives used mainly in mobile devices. Despite firm demand for construction repair materials, overall sales of products for construction and civil engineering remained unchanged year on year due to a drop in demand for civil engineering repair materials. Amenity care materials sales were firm thanks to an increase in the sales volume of silver-based inorganic antimicrobial agents. Sales of electronics materials were sluggish due to lower sales volumes overall.

As a result, sales in this segment increased 1.0% year on year to ¥16,517 million. Segment income rose 9.3% to ¥3,290 million primarily due to higher sales volumes of functional adhesives and silver-based inorganic antimicrobial agents.

### **Plastics**

Sales of piping equipment remained firm due to an overall recovery in demand. Nursing care product sales were weak because of lower sales volume caused by intensifying competition. Elastomer compounds performed poorly due to an overall downturn in sales volumes.

As a result, sales in this segment decreased 1.9% year on year to ¥26,463 million. Segment income increased 5.5% to ¥1,349 million due to streamlining efforts, including revising unprofitable products and reducing costs.

### **Other Businesses**

Sales for this segment—which comprises new product development operations, the construction and repair of plants and production facilities, goods transportation services, and trading house operations—increased 10.3% year on year to ¥3,402 million, and segment income totaled ¥88 million.



### **Cash Flows**

Net cash provided by operating activities decreased by ¥5,269 million year on year to ¥18,023 million due to an increase in income taxes paid.

Net cash used in investing activities decreased by ¥8,188 million to ¥6,852 million due to lower purchases of property, plant and equipment.

Net cash used in financing activities decreased by ¥1,283 million to ¥2,094 million due to the conversion of long-term debt.

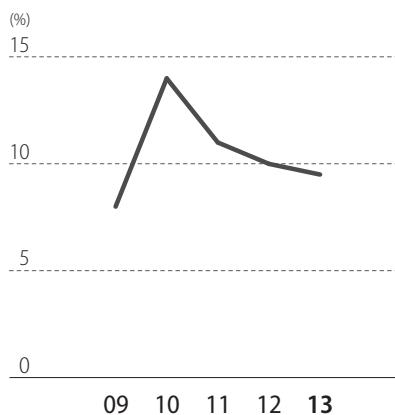
As a result, cash and cash equivalents at end of the year stood at ¥39,798 million, an increase of ¥10,269 million from the previous term-end.



### **Business Performance Prospects for Fiscal 2014**

For the current term, ending December 31, 2014, we forecast net sales of ¥154.0 billion, operating income of ¥15.0 billion, and net income of ¥10.0 billion.

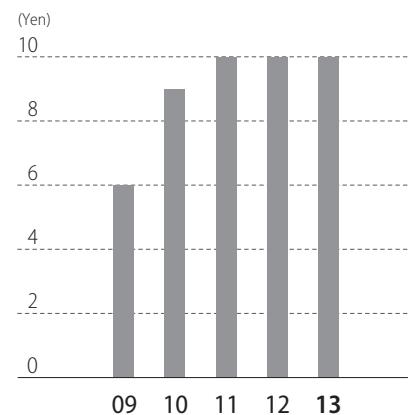
**Operating income ratio**



**Net income per share**



**Cash dividends**



## Cash Flow Prospects for Fiscal 2014

Net cash provided by operating activities is expected to be ¥18.0 billion, despite an increase in income taxes paid.

Net cash used in investing activities is expected to total ¥15.0 billion due to increased purchases of property, plant and equipment.

Net cash used in financing activities is expected to total ¥3.0 billion mainly due to dividend payments.

## Basic Policy on Shareholder Returns and Dividends for Fiscal 2013 and 2014

Our basic shareholder return policy is to pay stable dividends of ¥10 per share annually, taking into account the performance for the fiscal year in question, the future outlook, and forecast performance figures. However, we also place importance on ensuring a sufficient amount of retained earnings to maintain a sound financial position. We must secure sufficient funding to finance R&D activities and capital investment needed to prepare us for an expected increase in competition.

For fiscal 2013, ended December 31, 2013, we made a term-end dividend payment of ¥5 per share. We have already paid an interim dividend of ¥5 per share, bringing the total annual dividend to ¥10 per share.

For the current term, ending December 31, 2014, we are planning an interim dividend payment of ¥5 per share, and a term-end payment of the same sum, for an annual dividend of ¥10 per share.

## Business Risks

### (1) Cost competition

The Group manufactures and sells many products that are difficult to differentiate from those of other companies in terms of their function and performance. Given the present trend of intensifying price competition, there is a possibility that the Group, despite its efforts to strengthen marketing activities and reduce costs, may not be able to maintain its competitive edge over rival companies that are able to sell products with the same qualities at lower prices. This could adversely affect the business performance and financial position of the Group.

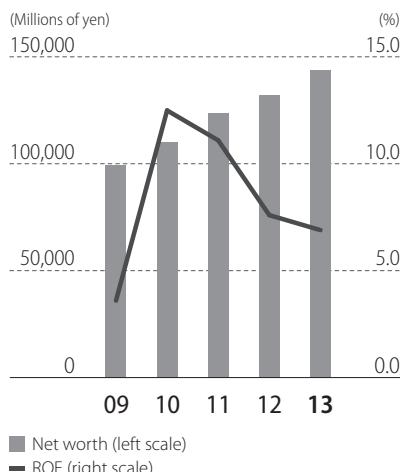
### (2) Changes in the price of crude oil and naphtha

The purchase prices of the major raw materials of products manufactured and sold by the Group are affected by changes in crude oil and naphtha prices. Therefore, if the Group is unable to sufficiently raise its product prices, and/or if the Group is unable to rationalize its operations sufficiently to offset the rising prices of crude oil and naphtha, there is a possibility that the Group's business performance and financial position will be adversely affected.

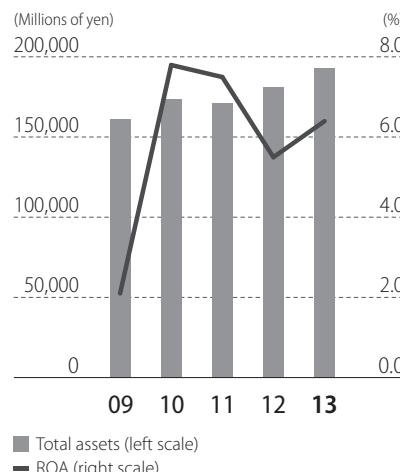
### (3) Product liability

In spite of our efforts to ensure a high level of product quality, there is a possibility that a customer or other party may experience financial losses or other forms of damage as a result of an unexpected defect in products manufactured and sold by the Group. As not all losses incurred will be covered by product

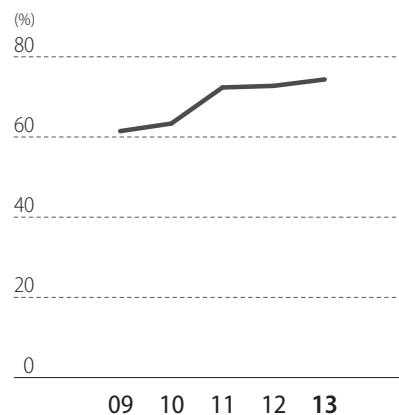
### Net worth / ROE



### Total assets / ROA



### Net worth ratio



liability insurance, this factor may adversely affect the business performance and financial position of the Group.

#### **(4) Impact of natural disasters**

The production plants of the Group are located mostly in the Tokai Region of Japan, which is said to be particularly at risk of the occurrence of a major earthquake. If such an earthquake were to occur, substantial losses, including the suspension of operations, could result, and this would adversely affect the business performance and financial position of the Group.

#### **(5) Major litigation**

In the event of a major lawsuit being brought against the Group in the future, there is a possibility that this will adversely affect its business performance and financial position.

#### **(6) Deferred tax assets**

The deferred tax assets of the Group are based on an amount that is recorded after judging the potential for collection based on forecasts of future taxable income. If such forecasts deviate significantly from actual results, there is a possibility that this will adversely affect the business performance and financial position of the Group.

#### **(7) Changes in foreign currency exchange rates**

For the reporting period, overseas sales of the Group accounted for 15.3% of total sales. The Group includes seven overseas consolidated subsidiaries and one overseas affiliated company subject to the equity method. There is therefore a possibility of a change in exchange rates adversely affecting the business performance

and financial position of the Group.

#### **(8) Changes in interest rates**

The Group is committed to further reducing interest-bearing debt, to improve the overall financial balance. However, there is a possibility that a change in interest rates will influence the business performance and financial position of the Group.

#### **(9) Application of accounting for the impairment of fixed assets**

In line with accounting law in Japan, the Group has applied impairment accounting for fixed assets. As a result, in the event of a significant future decline in market prices of land, and/or a deterioration in the Group's operating environment, there is a possibility of the posting of a substantial impairment loss, which would adversely affect the Group's business performance and financial position. The Group is fully aware of the risks outlined above, and has measures in place to minimize their impact on operating results and financial position, at the Group and Group company level.

Estimates or projections included in this report are based on facts known to the Company's management as of the time of writing, and actual results may therefore differ substantially from such statements.

#### **Capital investment**

(Millions of yen)

15,000

10,000

5,000

0

09 10 11 12 13

#### **Depreciation and amortization expenditures**

(Millions of yen)

10,000

8,000

6,000

4,000

2,000

0

09 10 11 12 13

#### **Research and development expense**

(Millions of yen)

5,000

4,000

3,000

2,000

0

09 10 11 12 13

# Consolidated Balance Sheets

Toagosei Co., Ltd. and Consolidated Subsidiaries

December 31,	Millions of yen		Thousands of U.S. dollars (Note 4)
	2013	2012	
<b>Assets</b>			
Current assets:			
Cash and deposits (Note 16).....	¥ 17,029	¥ 17,096	\$ 161,584
Notes and accounts receivable (Note 16).....	43,028	43,434	408,277
Securities (Note 16).....	23,000	14,000	218,237
Inventories (Note 5).....	15,795	15,989	149,874
Deferred tax assets (Note 21).....	1,411	1,094	13,393
Income taxes receivable .....	194	330	1,846
Other current assets .....	1,385	1,396	13,148
Allowance for doubtful receivables.....	(70)	(57)	(667)
Total current assets .....	101,774	93,284	965,694
Property, plant and equipment (Notes 13, 19 and 26): .....	237,981	236,740	2,258,099
Accumulated depreciation .....	(172,079)	(170,674)	(1,632,789)
Property, plant and equipment, net.....	65,901	66,065	625,309
Intangible fixed assets, net .....	815	902	7,737
Investments and other assets:			
Investment securities (Notes 16 and 17).....	19,092	14,316	181,162
Deferred tax assets (Note 21).....	813	2,735	7,717
Prepaid pension cost (Note 20).....	2,997	2,764	28,443
Other assets .....	1,762	1,452	16,719
Allowance for doubtful receivables.....	(70)	(70)	(670)
Total investments and other assets .....	24,595	21,198	233,371
<b>Total assets</b> .....	<b>¥193,086</b>	<b>¥181,451</b>	<b>\$1,832,113</b>

See accompanying notes to consolidated financial statements.

	Millions of yen		Thousands of U.S. dollars (Note 4)
	2013	2012	2013
<b>Liabilities and net assets</b>			
Current liabilities:			
Notes and accounts payable (Note 16).....	¥ 15,735	¥ 14,878	\$ 149,307
Short-term bank loans (Notes 16 and 19).....	2,385	2,436	22,631
Current portion of long-term debt (Notes 16 and 19).....	4,853	3,797	46,050
Accrued income taxes .....	2,269	4,064	21,536
Other current liabilities.....	9,084	8,612	86,194
Total current liabilities.....	34,327	33,789	325,721
Long-term liabilities:			
Long-term debt (Notes 16 and 19).....	5,986	6,145	56,805
Deferred tax liabilities (Note 21).....	225	164	2,138
Accrued retirement benefits for employees (Note 20) .....	313	454	2,974
Accrued retirement benefits for directors.....	20	29	195
Other long-term liabilities.....	4,064	4,627	38,561
Total long-term liabilities.....	10,610	11,421	100,675
Commitments and contingencies (Note 21)			
Net assets:			
Shareholders' equity (Notes 24, 27, 28 and 31):			
Common stock, without par value:			
Authorized – 550,000,000 shares			
Issued – 263,992,598 shares.....	20,886	20,886	198,182
Capital surplus .....	16,798	16,796	159,392
Retained earnings.....	100,790	93,821	956,354
Treasury stock.....	(178)	(120)	(1,690)
Total shareholders' equity.....	138,296	131,384	1,312,237
Accumulated other comprehensive income:			
Unrealized holding gain on available-for-sale securities.....	4,424	1,412	41,980
Translation adjustments.....	1,000	(722)	9,497
Total accumulated other comprehensive income .....	5,425	689	51,477
Minority interests.....	4,426	4,166	42,000
Total net assets.....	148,148	136,240	1,405,715
<b>Total liabilities and net assets</b> .....	<b>¥193,086</b>	<b>¥181,451</b>	<b>\$1,832,113</b>

# Consolidated Statements of Income and Consolidated Statements of Comprehensive Income

Toagosei Co., Ltd. and Consolidated Subsidiaries

## Consolidated Statements of Income

Years ended December 31,	Millions of yen		Thousands of U.S. dollars (Note 4)
	2013	2012	
Net sales.....	¥151,081	¥148,203	\$1,433,548
Cost of sales.....	112,204	108,246	1,064,656
Gross profit.....	38,877	39,956	368,891
Selling, general and administrative expenses (Notes 20 and 25).....	24,376	25,372	231,296
Operating income.....	14,501	14,583	137,594
Other income (expenses):			
Interest and dividend income.....	450	452	4,271
Equity in earnings of affiliates.....	294	271	2,798
Interest on refund of income taxes and other.....	66	214	630
Foreign currency exchange gain .....	186	37	1,764
Interest expense.....	(127)	(142)	(1,210)
Environment readiness fee .....	(99)	(158)	(943)
Subsidy income.....	294	287	2,796
Compensation income (Note 9).....	124	515	1,176
Gain on extinguishment of tie-in shares (Note 10).....	—	87	—
Loss on disposal of property, plant and equipment (Note 12).....	(249)	(521)	(2,368)
Impairment loss on property, plant and equipment (Note 13) .....	(784)	(787)	(7,442)
Loss on valuation of investment securities.....	—	(313)	—
Other, net .....	75	(8)	713
Income before income taxes and minority interests.....	14,731	14,518	139,783
Income taxes (Note 21):			
Current.....	4,845	5,348	45,980
Prior years (Note 11) .....	—	(712)	—
Deferred .....	11	(168)	109
	4,857	4,466	46,089
Income before minority interests.....	9,874	10,051	93,693
Minority interests.....	269	352	2,554
Net income (Note 31) .....	¥ 9,605	¥ 9,699	\$ 91,138

## Consolidated Statements of Comprehensive Income

Years ended December 31,	Millions of yen		Thousands of U.S. dollars (Note 4)
	2013	2012	
Income before minority interests.....	¥ 9,874	¥10,051	\$ 93,693
Unrealized holding gain on available-for-sale securities.....	3,015	245	28,608
Translation adjustments.....	1,883	1,047	17,870
Total other comprehensive income.....	4,898	1,293	46,479
Comprehensive income (Note 14).....	¥14,772	¥11,345	\$140,172
Comprehensive income attributable to owners of the parent.....	¥14,340	¥10,901	\$136,069
Comprehensive income attributable to minority interests.....	432	443	4,102

See accompanying notes to consolidated financial statements.

# Consolidated Statements of Changes in Net Assets

Toagosei Co., Ltd. and Consolidated Subsidiaries

	Millions of yen				
	Shareholders' equity				
Year ended December 31, 2013	Common stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity
Balance at beginning of the year .....	¥20,886	¥16,796	¥ 93,821	¥(120)	¥131,384
Changes during the year:					
Cash dividends.....			(2,635)		(2,635)
Net income .....			9,605		9,605
Purchase of treasury stock.....				(63)	(63)
Gain on sales of treasury stock.....		1		5	6
Net changes in items other than shareholders' equity.....					
Total changes during the year .....	—	1	6,969	(57)	6,912
Balance at end of the year .....	¥20,886	¥16,798	¥100,790	¥(178)	¥138,296

	Millions of yen				
	Accumulated other comprehensive income				
Year ended December 31, 2013	Unrealized holding gain on available-for-sale securities	Translation adjustments	Total accumulated other comprehensive income	Minority interests	Total net assets
Balance at beginning of the year .....	¥1,412	¥ (722)	¥ 689	¥4,166	¥136,240
Changes during the year:					
Cash dividends.....					(2,635)
Net income .....					9,605
Purchase of treasury stock.....					(63)
Gain on sales of treasury stock.....					6
Net changes in items other than shareholders' equity.....	3,012	1,723	4,735	259	4,994
Total changes during the year .....	3,012	1,723	4,735	259	11,907
Balance at end of the year .....	¥4,424	¥1,000	¥5,425	¥4,426	¥148,148

	Thousands of U.S. dollars (Note 4)				
	Shareholders' equity				
Year ended December 31, 2013	Common stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity
Balance at beginning of the year .....	\$198,182	\$159,378	\$890,227	\$(1,142)	\$1,246,646
Changes during the year:					
Cash dividends.....			(25,011)		(25,011)
Net income .....			91,138		91,138
Purchase of treasury stock.....				(599)	(599)
Gain on sales of treasury stock.....		13		50	63
Net changes in items other than shareholders' equity.....					
Total changes during the year .....	—	13	66,126	(548)	65,591
Balance at end of the year .....	\$198,182	\$159,392	\$956,354	\$(1,690)	\$1,312,237

	Thousands of U.S. dollars (Note 4)				
	Accumulated other comprehensive income				
Year ended December 31, 2013	Unrealized holding gain on available-for-sale securities	Translation adjustments	Total accumulated other comprehensive income	Minority interests	Total net assets
Balance at beginning of the year .....	\$13,398	\$ (6,851)	\$ 6,546	\$39,537	\$1,292,730
Changes during the year:					
Cash dividends.....					(25,011)
Net income .....					91,138
Purchase of treasury stock.....					(599)
Gain on sales of treasury stock.....					63
Net changes in items other than shareholders' equity.....	28,582	16,348	44,931	2,462	47,393
Total changes during the year .....	28,582	16,348	44,931	2,462	112,985
Balance at end of the year .....	\$41,980	\$ 9,497	\$51,477	\$42,000	\$1,405,715

# Consolidated Statements of Changes in Net Assets

Toagosei Co., Ltd. and Consolidated Subsidiaries

	Millions of yen				
	Shareholders' equity				
	Common stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity
Year ended December 31, 2012					
Balance at beginning of the year .....	¥20,886	¥16,797	¥86,758	¥(103)	¥124,338
Changes during the year:					
Cash dividends.....			(2,636)		(2,636)
Net income .....			9,699		9,699
Purchase of treasury stock.....				(22)	(22)
Gain (loss) on sales of treasury stock....		(0)		5	5
Net changes in items other than shareholders' equity.....					
Total changes during the year .....	—	(0)	7,063	(16)	7,045
Balance at end of the year .....	¥20,886	¥16,796	¥93,821	¥(120)	¥131,384

	Millions of yen				
	Accumulated other comprehensive income				
	Unrealized holding gain on available-for-sale securities	Translation adjustments	Total accumulated other comprehensive income	Minority interests	Total net assets
Year ended December 31, 2012					
Balance at beginning of the year .....	¥1,166	¥(1,678)	¥ (511)	¥3,950	¥127,776
Changes during the year:					
Cash dividends.....					(2,636)
Net income .....					9,699
Purchase of treasury stock.....					(22)
Gain (loss) on sales of treasury stock....					5
Net changes in items other than shareholders' equity.....	245	956	1,201	216	1,418
Total changes during the year .....	245	956	1,201	216	8,464
Balance at end of the year .....	¥1,412	¥ (722)	¥ 689	¥4,166	¥136,240

See accompanying notes to consolidated financial statements.

# Consolidated Statements of Cash Flows

Toagosei Co., Ltd. and Consolidated Subsidiaries

Years ended December 31,	Millions of yen		Thousands of U.S. dollars (Note 4)
	2013	2012	
<b>Operating activities</b>			
Income before income taxes and minority interests.....	¥14,731	¥14,518	\$139,783
Adjustments to reconcile income before income taxes and minority interests to net cash provided by operating activities:			
Depreciation and amortization .....	7,645	8,422	72,546
Impairment losses on property, plant and equipment.....	784	787	7,442
Amortization of goodwill .....	9	9	94
Increase (decrease) in provision for doubtful receivables.....	12	(40)	118
Reversal of provision for retirement benefits.....	(374)	(328)	(3,553)
Decrease in other provisions.....	(13)	(12)	(124)
Interest and dividend income.....	(450)	(452)	(4,271)
Interest expense.....	127	142	1,210
Foreign currency exchange gain.....	(287)	(123)	(2,727)
Equity in earnings of affiliates.....	(294)	(271)	(2,798)
Subsidy income.....	(294)	(287)	(2,796)
Compensation income.....	(124)	(515)	(1,176)
Loss on disposal of property, plant and equipment.....	249	521	2,368
Loss on valuation of investment securities.....	—	313	—
Decrease (increase) in receivables.....	794	(1,041)	7,536
Decrease in inventories.....	554	1,198	5,264
Increase (decrease) in payables.....	627	(327)	5,954
Other, net .....	(524)	(148)	(4,976)
<b>Subtotal</b> .....	23,174	22,364	219,892
Interest and dividends received.....	769	682	7,305
Interest paid.....	(134)	(144)	(1,272)
Subsidy income received.....	294	287	2,796
Compensation income received.....	124	515	1,176
Income taxes paid.....	(6,205)	(411)	(58,878)
Net cash provided by operating activities.....	18,023	23,293	171,021
<b>Investing activities</b>			
Decrease (increase) in time deposits .....	1,417	(1,034)	13,453
Purchases of investment securities.....	(353)	(955)	(3,358)
Proceeds from redemption of investment securities.....	115	300	1,091
Purchases of property, plant and equipment.....	(6,917)	(12,827)	(65,638)
Other, net .....	(1,113)	(523)	(10,568)
Net cash used in investing activities .....	(6,852)	(15,041)	(65,020)
<b>Financing activities</b>			
Decrease in short-term bank loans .....	(46)	(50)	(443)
Proceeds from long-term debt.....	4,721	450	44,795
Repayment of long-term debt.....	(3,802)	(790)	(36,080)
Proceeds from sales of treasury stock.....	6	5	63
Purchases of treasury stock.....	(63)	(22)	(599)
Repayment of lease obligations.....	(102)	(110)	(972)
Cash dividends to shareholders.....	(2,807)	(2,858)	(26,634)
Net cash used in financing activities .....	(2,094)	(3,377)	(19,871)
Effect of exchange rate changes on cash and cash equivalents .....	1,192	658	11,311
Net increase in cash and cash equivalents.....	10,269	5,533	97,440
Cash and cash equivalents at beginning of the year.....	29,529	23,992	280,193
Increase in cash and cash equivalents resulting from merger of subsidiaries .....	—	3	—
Cash and cash equivalents at end of the year (Note 15). . . . .	¥39,798	¥29,529	\$377,634

See accompanying notes to consolidated financial statements.

# Notes to Consolidated Financial Statements

Toagosei Co., Ltd. and Consolidated Subsidiaries  
December 31, 2013

## 1. Basis of Preparation

Toagosei Co., Ltd. (the "Company") and its domestic subsidiaries maintain their books of account in conformity with accounting principles generally accepted in Japan, and its foreign subsidiaries maintain their books of account in conformity with those in their countries of domicile.

The accompanying consolidated financial statements have been prepared on the basis of accounting principles generally accepted in Japan, which are different in certain respects as to the application and disclosure requirements of International Financial Reporting Standards, and have been compiled from the consolidated financial statements prepared by the Company as required by the Financial Instruments and Exchange Act of Japan.

As permitted by the Financial Instruments and Exchange Act of Japan, amounts of less than one million yen have been omitted. Consequently, the totals shown in the accompanying consolidated financial statements (both in yen and U.S. dollars) do not necessarily agree with the sum of the individual amounts.

Certain amounts in the prior year's financial statements have been reclassified to conform to the current year's presentation.

## 2. Summary of Significant Accounting Policies

### (a) Principles of consolidation and accounting for investments in unconsolidated subsidiaries and affiliates

The accompanying consolidated financial statements include the accounts of the Company and any significant subsidiaries (collectively, the "Group") controlled directly or indirectly by the Company. Affiliated companies over which the Company exercises significant influence in terms of their operating and financial policies have been included in the accompanying consolidated financial statements on an equity basis. All significant intercompany balances and transactions have been eliminated in consolidation.

Investments in subsidiaries and affiliates which are not consolidated or accounted for by the equity method are carried at cost or less. Where there has been a permanent decline in the value of such investments, the Company has written down the investments.

The differences at the respective dates of acquisition between the cost and the underlying net equity of investments in consolidated subsidiaries and affiliated companies accounted for by the equity method are being amortized by the straight-line method over a period of five years.

### (b) Foreign currency translation

Receivables and payables in foreign currencies are translated into yen at the rates of exchange in effect at the balance sheet date.

Assets and liabilities of the foreign consolidated subsidiaries are translated at the same exchange rates. Revenue and expense accounts of the foreign consolidated subsidiaries are translated at periodical average rates during the year.

### (c) Cash deposits

All highly liquid investments with a maturity of three months or less when purchased are considered cash equivalents.

### (d) Inventories

Inventories are stated at the lower of cost or net selling value, cost being determined by the moving average method. (The balance sheet amounts are written down if there is any decrease in profitability.)

### (e) Property, plant and equipment and depreciation (excluding leased assets)

Depreciation of property, plant and equipment of the Company and its consolidated subsidiaries is calculated by the straight-line method based on the estimated useful lives of the respective assets and their residual value.

### (f) Intangible fixed assets (excluding leased assets)

Amortization of intangible fixed assets, primarily consisting of software, is calculated by the straight-line method based on the estimated useful lives of the respective assets in this category (5 years for software).

### (g) Securities and investment securities

Securities other than those of subsidiaries and affiliates are classified into three categories: trading, held-to-maturity and available-for-sale securities. Marketable securities classified as available-for-sale securities are carried at fair value determined based on the average of quoted prices (or their equivalent) in the one-month period prior to the balance sheet date with changes in unrealized holding gain or loss, net of the applicable income taxes, included directly in net assets. Non-marketable securities classified as available-for-sale securities are carried at cost. Cost of securities sold is determined by the moving average method.

### (h) Income taxes

Deferred tax assets and liabilities are recognized in the consolidated financial statements determined with respect to the differences between financial reporting and the tax bases of assets and liabilities and are measured using the enacted tax rates and laws which will be in effect when the differences are expected to reverse.

### (i) Research and development costs

Research and development costs are charged to income when incurred.

### (j) Leases

Lease transactions had been primarily accounted for as operating leases (regardless of whether such leases were classified as operating or finance leases) except for the lease agreements which stipulate the transfer of ownership of the leased assets to the lessee.

The revised accounting standards require that all finance lease transactions shall be capitalized by recognizing leased assets and corresponding lease obligations in the balance sheet. Depreciation of leased assets shall be calculated based on the assumption that the useful lives equal the lease term and the residual value is zero.

Lease transactions contracted that do not transfer ownership, before January 1, 2009, continue to be accounted for as operating leases.

### (k) Allowance for doubtful receivables

The allowance for bad debts and doubtful receivables in respect of individual bad debts is provided in an amount sufficient to cover credit losses based on the collectability of individual receivables. The allowance for receivables other than those described above is based on past credit loss experience.

### (l) Retirement benefits for employees and directors

Accrued retirement benefits for employees are provided mainly at an amount calculated based on the retirement benefit obligation and the fair value of the pension plan assets as of the balance sheet date, as adjusted for the unrecognized net retirement benefit obligation at transition and unrecognized actuarial gain or loss. The retirement benefit obligation is attributed to each period by the straight-line method over the estimated years of service of the eligible employees. When pension plan assets are less than the retirement benefit obligation as adjusted for the unrecognized actuarial gain or loss, the amount is booked as accrued retirement benefits and when pension plan assets are more than retirement benefit obligation as adjusted for the unrecognized actuarial gain or loss, the amount is booked as prepaid pension cost. Actuarial gain or loss of the Company is amortized in the year following the year in which the gain or loss is recognized by the straight-line method over the average remaining years of service of the eligible employees (13 to

15 years). Actuarial gain or loss of two consolidated subsidiaries are amortized by the straight-line method over a period (5 years and 10 years, respectively) which is shorter than the average remaining years of service of the eligible employees.

In addition, prior service costs are expensed using the straight-line method over the average remaining years of service of the eligible employees (5 to 17 years). The prior service cost of one consolidated subsidiary is expensed using the straight-line method over the average remaining years of service of the eligible employees (15 years).

In addition, directors of the Company and one consolidated subsidiary are customarily entitled to lump-sum payments under the unfunded retirement benefits plans. The provision for retirement benefits for these officers has been made at estimated amounts.

#### (m) Derivative financial instruments

The Company has entered into various contracts of derivative financial instruments in order to manage certain risks arising from adverse fluctuations in interest rates. Derivative financial instruments are carried at fair value with any changes in unrealized gain or loss charged or credited to income, unless when those which meet certain hedging criteria for special accounting treatment under which any differences paid or received on the interest rate swaps are recognized as adjustments to interest expense over the life of such swaps, thereby adjusting the effective interest rate on the hedged items, which are the underlying borrowings.

#### (n) Appropriation of retained earnings

Under Corporation Law of Japan, the appropriation of retained earnings with respect to a given financial year is made by resolution of the shareholders at a general meeting to be held subsequent to the close of such financial year. The accounts for that year do not, therefore, reflect such appropriations.

### 3. Accounting Standards Issued but Not Yet Effective

#### *Accounting standard for retirement benefits*

"Accounting Standard for Retirement Benefits" (ASBJ Statement No. 26 issued on May 17, 2012) and "Guidance on Accounting Standard for Retirement Benefits" (ASBJ Guidance No. 25 issued on May 17, 2012).

Under the revised accounting standard, actuarial gains and losses and unrecognized prior service costs that are yet to be recognized in profit or loss shall be recognized within net assets (accumulated other comprehensive income), after adjusting for tax effects, and the deficit or surplus shall be recognized as a liability or asset. The retirement benefit obligation can be attributed to each period by the benefit formula basis by the straight-line method and the calculation method for the discount rate shall be changed.

The Company expects to apply the revised accounting standard from the fiscal year ended December 31, 2014 and apply the revised calculation method for the projected benefit obligation and service cost from beginning of the fiscal year ended December 31, 2015. As of December 31, 2013, the Company is in the process of measuring the effects of applying the revised accounting standard on financial statements.

### 4. U.S. Dollar Amounts

The translation of yen amounts into U.S. dollar amounts is made at ¥105.39 = US\$1.00, the approximate exchange rate at December 31, 2013, and is included solely for convenience. The translation should not be construed as a representation that yen have been, could have been, or could in the future be, converted into U.S. dollars at the above or any other rate.

### 5. Inventories

Inventories at December 31, 2013 and 2012 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2013	2012	2013
Merchandise and finished products...	¥10,991	¥10,981	\$104,294
Work in process .....	340	414	3,233
Raw materials and supplies.....	4,462	4,593	42,347
	¥15,795	¥15,989	\$149,874

### 6. Property, Plant and Equipment

Property, plant and equipment, net at December 31, 2013 and 2012 were summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2013	2012	2013
Land .....	¥17,801	¥17,299	\$168,914
Buildings and structures.....	19,982	20,096	189,607
Machinery, equipment and other....	20,068	20,798	190,420
Construction in progress.....	7,863	7,637	74,612
Leased assets.....	185	234	1,755
	¥65,901	¥66,065	\$625,309

### 7. Selling Expenses

The components of selling expenses for the years ended December 31, 2013 and 2012 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2013	2012	2013
Transportation expenses .....	¥8,471	¥8,603	\$80,382
Salaries.....	1,917	2,163	18,195
Bonuses .....	722	709	6,859
Depreciation and amortization.....	138	208	1,312
Retirement benefit expenses.....	175	198	1,661

### 8. General and Administrative Expenses

The components of general and administrative expenses for the years ended December 31, 2013 and 2012 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2013	2012	2013
Salaries.....	¥2,154	¥2,262	\$20,439
Bonuses .....	983	1,025	9,336
Depreciation and amortization.....	1,039	1,093	9,861
Retirement benefit expenses.....	278	333	2,642
Amortization of goodwill.....	9	9	94

### 9. Compensation Income

The Company recorded compensation income for the year ended December 31, 2013 and 2012 on payments made to a consolidated subsidiary from the Tokyo Electric Power Company pertaining to the accident at the Fukushima Daiichi and Daini Nuclear Power Stations.

## 10. Gain on Extinguishment of Tie-in Shares

The Company recorded a gain for the year ended December 31, 2012 on extinguishment of tie-in shares of non-consolidated subsidiary, Tokaiunyuseikei Co., Ltd., by consolidated subsidiary, Aronkasei Co., Ltd., on April 1, 2012.

## 11. Income Taxes for Prior Years

The Company received an income tax refund during year ended December 31, 2012 for income taxes for prior years based on a mutual agreement reached between Japan and the United States on transfer pricing taxation.

## 12. Loss on Disposal of Property, Plant and Equipment

The components of loss on disposal of property, plant and equipment for the years ended December 31, 2013 and 2012 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2013	2012	2013
Machinery, equipment and other .....	¥ 48	¥ 59	\$ 463
Disposal costs .....	140	370	1,334
Buildings and structures, etc. ....	60	92	569

## 13. Impairment Loss on Property, Plant and Equipment

The Company and its consolidated subsidiaries have recognized impairment losses on the following classes of assets for the years ended December 31, 2013 and 2012:

2013			Millions of yen	Thousands of U.S. dollars
Location	Major use	Category		
Takaishi city, Osaka	Facilities for manufacturing ethylene carbonate	Machinery, etc.	¥645	\$6,124
Minato-ku, Nagoya city	Facilities for manufacturing ethylene carbonate	Machinery, etc.	138	1,317
Total .....			¥784	\$7,442

2012			Millions of yen	Thousands of U.S. dollars
Location	Major use	Category		
Minato-ku, Nagoya city	Facilities for manufacturing inorganic chloride	Buildings, structures and etc.	¥542	
Minato-ku, Nagoya city	Idle	Buildings and structures	245	
Total .....			¥787	

The Company and its consolidated subsidiaries have grouped business-use assets according to the minimum independent cash-flow-generating unit for the year ended December 31, 2013.

The Company wrote down the book values of certain ethylene carbonate production facilities that experienced a material drop in profitability to their respective recoverable amounts. Accordingly, ¥784 million (U.S.\$7,442 thousand) of impairment losses were recognized in the statement of income for the year ended December 31, 2013.

The Company and its consolidated subsidiaries have grouped business-use assets according to the minimum independent cash-flow-generating unit and have identified idle assets as one group for the purpose of accounting for impairment of property, plant and equipment on an individual basis for the year ended December 31, 2012.

When there is a decrease in profitability, no specific plan for future use, or the book value of such idle assets is less than their respective recoverable

amounts, the book value of the assets is written down to its recoverable amount. The assets listed in the above tables were written down to their respective recoverable amounts and ¥787 million of impairment losses were recognized in the statement of income for the year ended December 31, 2012.

The impairment losses consisted of ¥78 million (U.S.\$744 thousand) for buildings and structures, ¥704 million (U.S.\$6,681 thousand) for machinery, equipment and other and ¥1 million (U.S.\$15 thousand) for other for the year ended December 31, 2013, and consisted of ¥184 million for buildings and structures, ¥0 million for other, and ¥602 million for removal costs for the year ended December 31, 2012.

The recoverable amounts applicable to assets for which impairment losses were recognized for corresponding year ended December 31, 2013 were measured using the utility value. This utility value was calculated by discounting future cash flows using a discount rate of 8.1%.

The corresponding recoverable amounts were measured based on the memorandum value of the assets for the year ended December 31, 2012.

## 14. Comprehensive Income

Reclassification adjustment and tax effect of other comprehensive income were summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2013	2012	2013
Unrealized holding gain on available-for-sale securities			
Amount arising during the fiscal year.....	¥4,585	¥99	\$43,512
Reclassification adjustment.....	(3)	278	(34)
Amount before tax effect.....	4,582	378	43,477
Tax effect.....	(1,567)	(133)	(14,869)
Unrealized holding gain on available-for-sale securities....	3,015	245	28,608
Translation adjustments			
Amount arising during the fiscal year.....	1,883	1,047	17,870
Amount before tax effect.....	1,883	1,047	17,870
Tax effect.....	—	—	—
Translation adjustments.....	1,883	1,047	17,870
Total other comprehensive income ...	¥4,898	¥1,293	\$46,479

## 15. Cash and Cash Equivalents

The components of cash and cash equivalents at December 31, 2013 and 2012 were summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2013	2012	2013
Cash and deposits.....	¥17,029	¥17,096	\$161,584
Securities.....	23,000	14,000	218,237
Time deposits with terms in excess of 3 months.....	(230)	(1,567)	(2,187)
	¥39,798	¥29,529	\$377,634

## 16. Financial Instruments

### 1. Matters related to the status of financial instruments

#### (1) Policies on financial instruments

When managing surplus funds, the Group limits the application of such funds to highly secure financial assets, mainly short-term bank deposits, and it procures funds mainly through bank borrowings. Derivative transactions are

used to hedge interest fluctuation risk present in borrowings, but are not used for speculative or trading purposes.

#### (2) Description of financial instruments and associated risks

Notes and accounts receivable, which represent trade receivables, are exposed to client-based credit risk. Furthermore, foreign currency denominated trade receivables are also subject to exchange rate fluctuation risks. In order to counter such risk, foreign currency borrowings are used when necessary as a means of hedging the net position of foreign currency denominated trade payables. Securities and investment securities are primarily negotiable deposits, held-to-maturity securities and shares related to businesses, and are thus exposed to risk stemming from fluctuations in market value.

Notes and accounts payable, which represent trade payables, are due within one year. A portion of these are foreign currency denominated items related to payment for raw material imports, which are subject to exchange rate fluctuation risk. These are constantly maintained within the balance of receivables denominated in the same foreign currencies. Borrowings are used to procure funds necessary for operational transactions and capital expenditures. A portion of these borrowings bearing variable interest rates are exposed to interest rate fluctuation risk. Derivative transactions (interest rate swap transactions) are used as a means of hedging.

The interest rate swap transactions are entered into in order to hedge against risk associated with fluctuations in interest rates on borrowings. Information on hedge accounting-related matters such as hedging instruments, hedged items, hedging policies and methods of assessing the effectiveness of hedging can be found in Note 2 (m).

#### (3) Risk management systems related to financial instruments

##### *(a) Management of credit risk (risk associated with non-performance of a contract by a business partner etc.)*

The departments in charge of Company operations regularly monitor the trade receivable status of all business partners in accordance with the Regulations on Selling in order to identify business partner-based credit risk associated with the deterioration of financial circumstances or other causes at an early stage and reduce it. In case of the consolidated subsidiaries, their divisions or accounting departments also manage the financial and credit status of their business partners pursuant to their own regulations.

Derivative transactions are entered into only with highly rated financial institutions.

The maximum credit risk value as of the date of closing of consolidated accounts for the current term is expressed by the value of financial assets in the consolidated balance sheet which are subject to credit risk.

##### *(b) Management of market risk (risk associated with exchange rate and interest rate fluctuations)*

When necessary, the Company uses borrowings denominated in foreign currencies to hedge its foreign currency denominated trade receivables and trade payables. Interest rate swaps are used to reduce risk associated with fluctuations in interest expenses related to borrowings.

The Company regularly monitors the fair value of securities and investment securities, and the financial condition of the issuers (its business partners).

Derivative transactions are individually approved by the director of finance and accounting before being entered into by the finance and accounting department, and their position and profit/loss situation are managed regularly.

##### *(c) Management of liquidity risk associated with procuring funds (the risk of being unable to execute a payment on the due date)*

The Company and its consolidated subsidiaries have formulated cash flow management plans and manage liquidity risk by, for example, keeping a

certain amount of cash reserves on hand. The conclusion of commitment line agreements with a total value of ¥10 billion also serves to reduce liquidity risk.

#### (4) Supplementary information regarding the fair value of financial instruments

The fair value of financial instruments consists of their market price-based value, and, if a market price is not available, their logically calculated value. Variable factors are incorporated into the calculations of the fair value, and different fair values are possible depending on the differing assumptions used.

#### **2. Fair value of financial instruments**

The fair value and carrying value of financial instruments and the difference between both values are shown below. Financial instruments whose fair value is extremely difficult to determine, are not included in the table below. (Please refer to Note 2.)

	Millions of yen		
December 31, 2013	Carrying value	Fair value	Difference
(1) Cash and deposits.....	¥17,029	¥17,029	—
(2) Notes and accounts receivable .....	43,028	43,028	—
(3) Securities and investment securities:			
Available-for-sale securities.....	38,884	38,884	—
Total assets .....	98,942	98,942	—
(1) Notes and accounts payable.....	15,735	15,735	—
(2) Short-term bank loans.....	7,238	7,238	—
(3) Long-term debt.....	5,861	5,923	¥62
Total liabilities .....	¥28,834	¥28,897	¥62
Total derivative transactions.....	—	—	—

	Thousands of U.S. dollars		
December 31, 2013	Carrying value	Fair value	Difference
(1) Cash and deposits.....	\$161,584	\$161,584	—
(2) Notes and accounts receivable .....	408,277	408,277	—
(3) Securities and investment securities:			
Available-for-sale securities.....	368,960	368,960	—
Total assets .....	938,821	938,821	—
(1) Notes and accounts payable.....	149,307	149,307	—
(2) Short-term bank loans.....	68,682	68,682	—
(3) Long-term debt.....	55,612	56,207	\$594
Total liabilities .....	\$273,602	\$274,197	\$594
Total derivative transactions.....	—	—	—

	Millions of yen		
December 31, 2012	Carrying value	Fair value	Difference
(1) Cash and deposits.....	¥17,096	¥17,096	—
(2) Notes and accounts receivable .....	43,434	43,434	—
(3) Securities and investment securities:			
(i) Held-to-maturity securities.....	100	100	¥ 0
(ii) Available-for-sale securities.....	24,977	24,977	—
Total assets .....	85,608	85,609	0
(1) Notes and accounts payable.....	14,878	14,878	—
(2) Short-term bank loans.....	6,234	6,234	—
(3) Long-term debt.....	5,986	6,031	44
Total liabilities .....	¥27,099	¥27,144	¥44
Total derivative transactions.....	—	—	—

**(Note 1)**

Valuation method of financial instruments and matters related to securities and derivative transactions.

Assets

*(1) Cash and cash equivalents, and (2) Notes and accounts receivable*

As all of these are settled within a short span of time, the fair value is virtually identical to the carrying value. Therefore, the carrying value is used.

*(3) Securities and investment securities*

In the case of the fair value of securities and investment securities, shares are stated at the exchange-listed price and securities are stated at the exchange-listed price or the price quoted by the correspondent financial institution. In the case of those available-for-sale securities which are settled within a short span of time, the fair value is virtually identical to the carrying value. Therefore, the carrying value is used.

Liabilities

*(1) Notes and accounts payable, and (2) Short-term bank loans*

As all of these are settled within a short span of time, the fair value is virtually identical to the carrying value. Therefore, the carrying value is used.

*(3) Long-term debt*

The fair value of long-term debt is calculated as the present value by discounting the total principal and interest on the borrowings by the interest rate which would be assumed if new, similar borrowings were made.

Derivative transactions

Please refer to Note 18.

**(Note 2)**

Financial instruments whose fair value is extremely difficult to determine.

	Millions of yen		Thousands of U.S. dollars
	2013	2012	2013
Investments in unconsolidated subsidiaries and affiliates.....	¥2,259	¥2,281	¥21,442
Available-for-sale securities:			
Unlisted securities.....	947	947	8,993
Other.....	0	9	0
Total .....	¥3,207	¥3,239	¥30,439

It is extremely difficult to determine the fair value of these items, as they do not have market prices and future cash flow cannot be estimated. Therefore, they are not included in "Assets: (3) Securities and investment securities in the preceding table."

**(Note 3)**

The redemption schedule for monetary claims, held-to-maturity securities and available-for-sale securities with maturities subsequent to the consolidated balance sheet date.

December 31, 2013	Millions of yen			
	1 year or less	Over 1 year to 5 years	Over 5 years to 10 years	Over 10 years
Cash equivalents.....	¥17,029	—	—	—
Notes and accounts receivable.....	43,028	—	—	—
Securities and investment securities:				
Available-for-sale securities with maturities.....	23,000	—	—	—
Total .....	¥83,057	—	—	—

December 31, 2013	Thousands of U.S. dollars			
	1 year or less	Over 1 year to 5 years	Over 5 years to 10 years	Over 10 years
Cash equivalents.....	\$161,584	—	—	—
Notes and accounts receivable.....	408,277	—	—	—
Securities and investment securities:				
Available-for-sale securities with maturities.....	218,237	—	—	—
Total .....	\$788,098	—	—	—

December 31, 2012	Millions of yen			
	1 year or less	Over 1 year to 5 years	Over 5 years to 10 years	Over 10 years
Cash equivalents.....	¥17,088	—	—	—
Notes and accounts receivable.....	43,434	—	—	—
Securities and investment securities:				
Held-to-maturity securities.....	—	—	¥100	—
Available-for-sale securities with maturities.....	14,000	—	—	—
Total .....	¥74,523	—	¥100	—

**(Note 4)**

Please refer to Note 19 as to the redemption schedule for long-term debt subsequent to the consolidated balance sheet date.

**17. Investment Securities**

*(a) At December 31, 2012, held-to-maturity securities for which market prices were available were summarized as follows:*

December 31, 2012	Millions of yen		
	Carrying value	Fair value	Unrealized gain (loss)
Unrealized gain:			
Corporate bonds.....	¥100	¥100	¥0
Unrealized loss:			
Corporate bonds.....	—	—	—
Total .....	¥100	¥100	¥0

At December 31, 2013, held-to-maturity securities were not applicable.

*(b) Marketable securities classified as available-for-sale securities as of December 31, 2013 and 2012 were summarized as follows:*

December 31, 2013	Millions of yen		
	Acquisition cost	Carrying value	Unrealized gain (loss)
Securities whose carrying value exceeds their acquisition cost:			
Stock.....	¥ 7,614	¥14,490	¥6,876
Securities whose acquisition cost exceeds their carrying value:			
Stock.....	1,582	1,394	(188)
Other.....	23,000	23,000	—
Total .....	¥32,196	¥38,884	¥6,688

	Thousands of U.S. dollars		
	Acquisition cost	Carrying value	Unrealized gain (loss)
<b>December 31, 2013</b>			
Securities whose carrying value exceeds their acquisition cost:			
Stock.....	\$ 72,246	\$137,494	\$65,248
Securities whose acquisition cost exceeds their carrying value:			
Stock.....	15,016	13,228	(1,788)
Other.....	218,237	218,237	—
Total .....	<b>\$305,499</b>	<b>\$368,960</b>	<b>\$63,460</b>
	Millions of yen		
	Acquisition cost	Carrying value	Unrealized gain (loss)
<b>December 31, 2012</b>			
Securities whose carrying value exceeds their acquisition cost:			
Stock.....	¥ 3,836	¥ 6,738	¥2,902
Securities whose acquisition cost exceeds their carrying value:			
Stock.....	5,024	4,238	(786)
Other.....	14,000	14,000	—
Total .....	<b>¥22,861</b>	<b>¥24,977</b>	<b>¥2,116</b>

## 18. Derivative Transactions

Derivative transactions to which hedge accounting is applied.  
Derivative transactions to which the deferred hedge accounting method is applied as of December 31, 2013 and 2012.

	Millions of yen		
	2013		
	Contract amount	Contract amount over one year	Fair value
Special treatment for interest rate swaps:			
Interest rate swaps			
(Hedged item: Long-term debt)			
Receive floating and pay fixed...	<b>¥1,269</b>	<b>¥1,171</b>	(*)
	Thousands of U.S. dollars		
	2013		
	Contract amount	Contract amount over one year	Fair value
Special treatment for interest rate swaps:			
Interest rate swaps			
(Hedged item: Long-term debt)			
Receive floating and pay fixed...	<b>\$12,041</b>	<b>\$11,111</b>	(*)
	Millions of yen		
	2012		
	Contract amount	Contract amount over one year	Fair value
Special treatment for interest rate swaps:			
Interest rate swaps			
(Hedged item: Long-term debt)			
Receive floating and pay fixed...	<b>¥3,664</b>	<b>¥541</b>	(*)

(\*) Because the interest rate swaps are accounted for with long-term debt as the hedged item, the fair value of the swaps is included in the fair value of the long-term debt.

## 19. Short-Term Bank Loans and Long-Term Debt

Short-term bank loans, principally unsecured, consisted of notes payable to banks bearing annual interest rates of 0.66% and 0.79% at December 31, 2013 and 2012, respectively.

Long-term debt at December 31, 2013 and 2012 consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2013	2012	2013
Loans with collateral from banks, insurance companies and other, bearing annual interest rates of 0.83% and 0.85% for current portion of long-term debt and lease obligations, and long-term debt and lease obligations less current portion at December 31, 2013, respectively.....	¥10,915	¥10,039	\$103,568
Less: current portion.....	10,915	10,039	103,568
	(4,928)	(3,893)	(46,762)
	<b>¥ 5,986</b>	<b>¥ 6,145</b>	<b>\$ 56,805</b>

Assets pledged as collateral for short-term bank loans and long-term debt at December 31, 2013 and 2012 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2013	2012	2013
Property, plant and equipment at net book value .....	<b>¥18,963</b>	<b>¥17,557</b>	<b>\$179,939</b>

The aggregate annual maturities of long-term debt and lease obligations subsequent to December 31, 2014 were summarized as follows:

Years ending December 31,	Millions of yen	Thousands of U.S. dollars
2015 .....	¥ 589	\$ 5,595
2016 .....	421	3,999
2017 .....	179	1,703
2018 .....	4,165	39,522
2019 and there after .....	630	5,984

## 20. Retirement Benefit Plans for Employees

The Company and its consolidated subsidiaries have a defined benefit plan consisting of a defined benefit corporate pension plan and a retirement lump-sum payment plan covering substantially all employees who are entitled to lump-sum or annuity payments, the amounts of which are determined by reference to their basic rates of pay, length of service and the conditions under which termination occurs. Further, their defined contribution plan consists of a defined contribution pension plan. A retirement benefit trust has also been established.

The following table sets forth the funded and accrued status of the plans, and the amounts recognized in the consolidated balance sheets as of December 31, 2013 and 2012 related to the Company's and the consolidated subsidiaries' defined benefit plans:

	Millions of yen		Thousands of U.S. dollars
	2013	2012	2013
Projected benefit obligation .....	¥ (9,646)	¥(10,320)	\$ (91,535)
Plan assets at fair value .....	13,000	10,503	123,353
Funded status.....	3,353	182	31,818
Unrecognized actuarial gain .....	62	2,265	593
Unrecognized prior service cost .....	(731)	(137)	(6,943)
Prepaid pension cost.....	(2,997)	(2,764)	(28,443)
Accrued retirement benefits .....	¥ (313)	¥ (454)	\$ (2,974)

The components of net periodic retirement benefit expenses for the years ended December 31, 2013 and 2012 were outlined as follows:

	Millions of yen		Thousands of U.S. dollars
	2013	2012	2013
Service cost .....	¥ 415	¥ 492	\$3,944
Interest cost.....	142	156	1,352
Expected return on plan assets.....	(78)	(80)	(741)
Amortization of actuarial loss.....	325	417	3,085
Amortization of unrecognized prior service cost .....	(43)	(19)	(410)
Other (*). ....	284	284	2,703
Total .....	<b>¥1,047</b>	<b>¥1,251</b>	<b>\$9,934</b>

(\*) Contribution to defined contribution plan

The assumptions used in accounting for the defined benefit plans for the years ended December 31, 2013 and 2012 were as follows:

	2013	2012
Discount rate.....	Mainly 1.5%	Mainly 1.5%
Expected rate of return on plan assets .....	Mainly 1.0%	Mainly 1.0%

## 21. Income Taxes

The Company and its domestic consolidated subsidiaries are subject to a number of taxes based on earnings, i.e. corporation tax, inhabitants' taxes and enterprise tax, which, in the aggregate, resulted in a statutory tax rate of approximately 37.8% and 40.5% for the years ended December 31, 2013 and 2012, respectively.

The effective tax rates reflected in the consolidated statements of income for the years ended December 31, 2013 and 2012 differ from the statutory tax rates for the following reasons:

	2013	2012
Statutory tax rate .....	<b>37.8%</b>	40.5%
Effect of:		
Permanent difference – entertainment expenses...	0.5	0.6
Permanent difference – dividend income.....	(0.9)	(0.5)
Inhabitants' per capita taxes .....	0.5	0.5
Amortization of goodwill .....	0.0	0.0
Equity in earnings of affiliates.....	(0.8)	(0.8)
Valuation allowance .....	(3.1)	(2.7)
Different tax rates applied to income of foreign consolidated subsidiaries .....	(0.8)	(0.9)
Tax deduction of experiment and research expenses .....	(1.5)	(1.9)
Income taxes-prior years.....	—	(4.9)
Other, net.....	1.1	0.8
Effective tax rates .....	<b>32.9%</b>	30.7%

Significant components of deferred tax assets and liabilities as of December 31, 2013 and 2012 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2013	2012	2013
<b>Deferred tax assets:</b>			
Loss on valuation of investment securities.....	¥ 658	¥1,064	\$ 6,247
Elimination of unrealized profit....	2,069	2,413	19,636
Accrued retirement benefits.....	635	824	6,029
Accrued enterprise tax .....	197	336	1,875
Net operating loss carry forwards...	55	89	523
Impairment loss on property, plant and equipment.....	1,455	1,304	13,814
Accrued costs of removing facilities.....	913	1,008	8,667
Other.....	1,190	1,087	11,295
Gross deferred tax assets.....	<b>7,176</b>	8,128	<b>68,090</b>
Valuation allowance .....	(1,766)	(2,616)	(16,761)
Total deferred tax assets.....	<b>5,409</b>	5,512	<b>51,328</b>
<b>Deferred tax liabilities:</b>			
Reserve under Special Taxation Measures Law .....	(303)	(323)	(2,877)
Undistributed earnings of overseas partnerships.....	(247)	(159)	(2,350)
Gain on contribution of securities to retirement benefit trust.....	(600)	(621)	(5,695)
Unrealized holding gain on available-for-sale securities...	(2,249)	(684)	(21,344)
Other.....	(9)	(57)	(94)
Total deferred tax liabilities .....	<b>(3,410)</b>	(1,847)	<b>(32,361)</b>
Net deferred tax assets.....	<b>¥1,998</b>	¥3,664	<b>\$18,967</b>

Following the promulgation of the "Act for Partial Amendment of the Income Tax Act, etc." on March 31, 2014, the special restoration surtax will be not imposed from fiscal years beginning on April 1, 2014. As a result, the domestic statutory tax rate to calculate deferred tax assets and liabilities will be reduced from the current 37.8% to 35.4% for temporary differences expected to reverse in fiscal years beginning on or after January 1, 2015. The effect of this change in tax rates is considered immaterial.

## 22. Business Combination

### *Transaction under common control*

#### (1) Outline of business combination

1. Names of companies involved and description of business activities

Name of combining company: Toagosei Co., Ltd.

Description of business: manufacture and sale of commodity chemicals, acrylic products, and specialty chemicals

Name of company subject to combination: Tsurumi Soda Co., Ltd.

Description of business: manufacture of inorganic chemical products

Name of company subject to combination: Nihon Junyaku Co., Ltd.

Description of business: manufacture of acrylic products

2. Date of business combination

January 1, 2013

3. Legal form of business combination

Absorption-type merger with Toagosei Co., Ltd. as the surviving company and Tsurumi Soda Co., Ltd. and Nihon Junyaku Co., Ltd. as the companies to be absorbed and merged.

4. Name of company after business combination

Toagosei Co., Ltd.

5. Reason for business combination

Toagosei Co., Ltd. absorbed and merged with its wholly owned subsidiaries Tsurumi Soda Co., Ltd. and Nihon Junyaku Co., Ltd.

The purpose of this business combination is to further consolidate management resources within the Group and to accelerate the pace of decision-making.

#### (2) Overview of accounting treatment

The business combination was undertaken and recorded for accounting purposes as a transaction under common control based on the "Accounting Standard for Business Combinations" (Accounting Standards Board of Japan (ASBJ) Statement No. 21, issued on December 26, 2008) and the "Guidance for Accounting Standard for Business Combinations and Accounting Standard for Business Divestitures" (ASBJ Guidance No. 10, issued on December 26, 2008).

## 23. Investment and Rental Property

Disclosures about the fair values of investment and rental property have not been presented as the total amount of the property is immaterial.

## 24. Capital Surplus and Retained Earnings

The Corporation Law of Japan provides that an amount equal to 10% of the amount to be disbursed as distributions of capital surplus (other than the capital reserve) and retained earnings (other than the legal reserve) be transferred to the capital reserve or the legal reserve until the sum of the capital reserve and the legal reserve equals 25% of the capital stock account. Such distributions can be made at any time by resolution of the shareholders or by the Board of Directors if certain conditions are met. The legal reserve amounted to ¥3,990 million (U.S.\$37,859 thousand) and ¥3,990 million as of December 31, 2013 and 2012, respectively.

## 25. Research and Development Costs

Research and development costs included in selling, general and administrative expenses and manufacturing costs for the years ended December 31, 2013 and 2012 were ¥3,767 million (U.S.\$35,752 thousand) and ¥4,360 million, respectively.

## 26. Leases

The following amounts represent the acquisition cost, accumulated depreciation and net book value of finance lease transactions entered into on or before December 31, 2008, except for the lease agreements which stipulate the transfer of ownership of the leased assets to the lessee, as of December 31, 2013 and 2012:

	Millions of yen		Thousands of U.S. dollars
	2013	2012	2013
Acquisition cost:			
Tools, furniture and fixtures.....	¥12	¥172	\$117
	¥12	¥172	\$117
Accumulated depreciation:			
Tools, furniture and fixtures.....	¥ 9	¥165	\$ 90
	¥ 9	¥165	\$ 90
Net book value:			
Tools, furniture and fixtures.....	¥ 2	¥ 6	\$ 26
	¥ 2	¥ 6	\$ 26

Lease payments relating to finance lease transactions accounted for as operating leases amounted to ¥3 million (U.S.\$35 thousand) and ¥19 million, respectively, which were equal to the depreciation expense of the leased assets computed by the straight-line method over the respective lease terms, for the years ended December 31, 2013 and 2012.

Future minimum lease payments (including the interest portion thereon) subsequent to December 31, 2013 for non-cancelable operating leases and finance leases accounted for as operating leases were summarized as follows:

Years ending December 31,	Millions of yen		Thousands of U.S. dollars	
	Operating leases	Finance leases	Operating leases	Finance leases
2014 .....	¥32	¥1	\$305	\$15
2015 and thereafter.....	14	1	133	11
Total .....	¥46	¥2	\$439	\$26

## 27. Treasury Stock

Number of shares of treasury stock for the years ended December 31, 2013 and 2012 were as follows:

Year ended December 31, 2013	Thousands of shares			
	January 1, 2013	Increase during the year	Decrease during the year	December 31, 2013
Treasury stock:				
Common stock.....	368	149	15	501
Total .....	368	149	15	501

Year ended December 31, 2012	Thousands of shares			December 31, 2012
	January 1, 2012	Increase during the year	Decrease during the year	
Treasury stock:				
Common stock.....	317	67	16	368
Total .....	317	67	16	368

## 28. Cash Dividends

Dividends paid in the years ended December 31, 2013 and 2012 were as follows:

Year ended December 31, 2013				
Resolution	Type of shares	Millions of yen		Thousands of U.S. dollars
		Gross amount	Gross amount	
March 28, 2013 100th Annual Shareholders' Meeting	Common stock	¥1,318	\$12,507	
August 2, 2013 Board of Directors	Common stock	¥1,317	\$12,504	

Year ended December 31, 2013				
Resolution	Yen	U.S. dollars	Per share	Record date
	Per share	Per share	Record date	Effective date
March 28, 2013 100th Annual Shareholders' Meeting	¥5.00	\$0.047		December 31, 2012      March 29, 2013
August 2, 2013 Board of Directors	¥5.00	\$0.047		June 30, 2013      September 5, 2013

Year ended December 31, 2012				
Resolution	Type of shares	Millions of yen		Thousands of U.S. dollars
		Gross amount		
March 27, 2012 99th Annual Shareholders' Meeting	Common stock	¥1,318		
August 2, 2012 Board of Directors	Common stock	¥1,318		

Year ended December 31, 2012				
Resolution	Yen	Per share	Record date	Effective date
	Per share	Per share	Record date	Effective date
March 27, 2012 99th Annual Shareholders' Meeting	¥5.00		December 31, 2011      March 28, 2012	
August 2, 2012 Board of Directors	¥5.00		June 30, 2012      September 6, 2012	

Dividends whose record date was in the year ended December 31, 2013, but whose effective date is in the year ending December 31, 2014 were as follows:

Year ended December 31, 2013				
Resolution	Type of shares	Millions of yen	Thousands of U.S. dollars	Resource
		Gross amount	Gross amount	
March 28, 2014 101th Annual Shareholders' Meeting	Common stock	¥1,317	\$12,500	Retained earnings

Year ended December 31, 2013				
Resolution	Yen	U.S. dollars	Per share	Record date
	Per share	Per share	Record date	Effective date
March 28, 2014 101th Annual Shareholders' Meeting	¥5.00	\$0.047		December 31, 2013      March 31, 2014

Dividends whose record date was in the year ended December 31, 2012 but whose effective date was in the year ending December 31, 2013 were as follows:

Year ended December 31, 2012				
Resolution	Type of shares	Millions of yen		Thousands of U.S. dollars
		Gross amount		Resource
March 28, 2013 100th Annual Shareholders' Meeting	Common stock	¥1,318		Retained earnings

Year ended December 31, 2012				
Resolution	Yen	Per share	Record date	Effective date
	Per share	Per share	Record date	Effective date
March 28, 2013 100th Annual Shareholders' Meeting	¥5.00		December 31, 2012      March 29, 2013	

## 29. Commitments and Contingencies

### Contingencies

At December 31, 2013 and 2012, the Company and its consolidated subsidiaries had the following contingent liabilities:

	Millions of yen		Thousands of U.S. dollars
	2013	2012	2013
Guarantees of indebtedness.....	¥132	¥117	\$1,258
	¥132	¥117	\$1,258

### Commitment line

The Company concluded an arrangement on June 28, 2011 for a committed line of credit up to ¥10,000 million with 13 banks in order to secure and obtain timely working capital.

At December 31, 2013 and 2012, the outstanding balance of the commitments were as follows:

	Millions of yen		Thousands of U.S. dollars
	2013	2012	2013
Total committed line of credit.....	¥10,000	¥10,000	\$94,885
Executed amount.....	¥ —	¥ —	\$ —
Unexecuted amount.....	¥10,000	¥10,000	\$94,885

## 30. Segment Information

### Business Segments

#### 1. Outline of reportable segments

The reportable segments of the Company and its consolidated subsidiaries are defined as operating segments for which discrete financial information is available and reviewed by the Board of Directors regularly in order to make decisions about resources to be allocated to individual segments and assess performance.

Group operating divisions are organized based on products and services and the operating divisions are responsible for comprehensive domestic and overseas comprehensive plans as to the products and services.

The four reportable segments of the Company are "Commodity Chemicals," "Acrylic Products," "Specialty Chemicals," and "Plastics" based on similarity of economic characteristics, and nature of products and services.

#### 2. Method of calculating net sales, income and loss, assets, liabilities and others

The accounting method applied to the reportable segments is the same as described in "Summary of Significant Accounting Policies." Segment income of the reportable segments is based on operating income. Intersegment sales or transfer amounts are determined on the basis of market prices.

Business segment information of the Company and its consolidated subsidiaries for the years ended December 31, 2013 and 2012 were summarized as follows:

Year ended December 31, 2013	Reportable segments								
	Millions of yen								
Sales:									
Sales to third parties.....	¥45,627	¥59,069	¥16,517	¥26,463	¥147,679	¥ 3,402	¥151,081	¥ —	¥151,081
Intersegment sales.....	35	106	480	3	627	7,583	8,211	(8,211)	—
Net sales.....	45,663	59,176	16,998	26,467	148,306	10,986	159,293	(8,211)	151,081
Segment income.....	3,374	6,274	3,290	1,349	14,289	88	14,377	123	14,501
Segment assets.....	35,980	55,413	17,025	36,645	145,063	1,922	146,986	46,099	193,086
Other items									
Depreciation.....	2,324	2,570	688	1,391	6,975	77	7,052	593	7,645
Amortization of goodwill.....	—	—	9	—	9	—	9	—	9
Investment in associates accounted for using equity method .....	678	—	169	—	847	—	847	—	847
Increase in tangible and intangible fixed assets ...	¥ 2,816	¥ 2,100	¥ 616	¥ 908	¥ 6,443	¥ 165	¥ 6,608	¥ 1,031	¥ 7,639

Year ended December 31, 2013	Reportable segments								
	Thousands of U.S. dollars								
Sales:									
Sales to third parties.....	\$432,940	\$560,489	\$156,731	\$251,102	\$1,401,263	\$ 32,284	\$1,433,548	\$ —	\$1,433,548
Intersegment sales.....	338	1,015	4,562	37	5,954	71,961	77,915	(77,915)	—
Net sales.....	433,279	561,504	161,294	251,139	1,407,217	104,245	1,511,463	(77,915)	1,433,548
Segment income.....	32,021	59,533	31,226	12,807	135,589	835	136,425	1,169	137,594
Segment assets.....	341,402	525,791	161,542	347,710	1,376,447	18,242	1,394,690	437,422	1,832,113
Other items									
Depreciation.....	22,058	24,394	6,533	13,199	66,185	731	66,916	5,629	72,546
Amortization of goodwill.....	—	—	94	—	94	—	94	—	94
Investment in associates accounted for using equity method .....	6,435	—	1,607	—	8,043	—	8,043	—	8,043
Increase in tangible and intangible fixed assets ...	\$ 26,727	\$ 19,934	\$ 5,852	\$ 8,621	\$ 61,136	\$ 1,568	\$ 62,705	\$ 9,785	\$ 72,491

Year ended December 31, 2012	Reportable segments Millions of yen								
	Commodity Chemicals	Acrylic Products	Specialty Chemicals	Plastics	Total	Others	Total	Adjustments	Consolidated
Sales:									
Sales to third parties.....	¥47,435	¥54,354	¥16,350	¥26,978	¥145,118	¥ 3,084	¥148,203	¥ —	¥148,203
Intersegment sales.....	86	71	435	16	610	7,939	8,549	(8,549)	—
Net sales.....	47,521	54,426	16,785	26,994	145,729	11,023	156,752	(8,549)	148,203
Segment income.....	4,413	5,764	3,011	1,279	14,468	30	14,498	85	14,583
Segment assets.....	37,442	53,276	17,500	35,970	144,189	2,059	146,248	35,203	181,451
Other items									
Depreciation.....	2,565	2,854	667	1,552	7,640	152	7,793	629	8,422
Amortization of goodwill.....	—	—	9	—	9	—	9	—	9
Investment in associates accounted for using equity method.....	700	—	119	—	820	—	820	—	820
Increase in tangible and intangible fixed assets ...	¥ 2,966	¥ 5,525	¥ 1,956	¥ 745	¥ 11,194	¥ 138	¥ 11,332	¥ 1,107	¥ 12,440

Notes: 1. The Others segment includes business operations relative to research and development, construction and repairing equipment, transportation and trading firm business.

2. "Adjustments" for the fiscal years ended December 31, 2013 and 2012 were as follows:

- (1) The adjustments to segment sales include intersegment eliminations.
- (2) The adjustments to segment assets include corporate assets of ¥65,939 million (US\$625,675 thousand) and ¥53,793 million for the years ended December 31, 2013 and 2012, respectively, that are not allocated to any reportable segments, and intersegment eliminations.
- (3) The adjustments to depreciation include mainly corporate expenses that are not allocated to any reportable segments.
- (4) The adjustments to increase in tangible and intangible fixed assets include mainly capital investment in corporate assets that are not allocated to any reportable segments.

3. Segment income is reconciled with operating income on the consolidated statements of income.

4. Depreciation in the table above includes amortization of long term prepaid expense.

#### Related information

##### 1. Information related to geographical information

###### (1) Net sales

Millions of yen					
Year ended December 31, 2013					
Japan	Asia	North America	Other	Total	
¥127,248	¥18,674	¥2,635	¥2,522	¥151,081	
Thousands of U.S. dollars					
Year ended December 31, 2013					
Japan	Asia	North America	Other	Total	
\$1,207,406	\$177,194	\$25,009	\$23,938	\$1,433,548	
Millions of yen					
Year ended December 31, 2012					
Japan	Asia	North America	Other	Total	
¥125,571	¥18,285	¥2,378	¥1,967	¥148,203	

###### (2) Information related to property, plant and equipment

This information is not required to be disclosed because the amount of property, plant and equipment in Japan exceeded 90% of the amount on the consolidated balance sheet.

##### 2. Information on major customers

This information is not required to be disclosed because net sales to any particular customer are less than 10% of the net sales on the consolidated statements of income.

##### *Impairment loss on property, plant and equipment by reportable segments*

Impairment loss on property, plant and equipment by reportable segments for the year ended December 31, 2013 and 2012 was summarized as follows:

Millions of yen						
Year ended December 31, 2013						
Commodity Chemicals	Acrylic Products	Specialty Chemicals	Plastics	Other	Adjustment	Total
¥—	¥—	¥784	¥—	¥—	¥—	¥784
Thousands of U.S. dollars						
Year ended December 31, 2013						
Commodity Chemicals	Acrylic Products	Specialty Chemicals	Plastics	Other	Adjustment	Total
\$—	\$—	\$7,442	\$—	\$—	\$—	\$7,442
Millions of yen						
Year ended December 31, 2012						
Commodity Chemicals	Acrylic Products	Specialty Chemicals	Plastics	Other	Adjustment	Total
¥542	¥—	¥—	¥—	¥—	¥245	¥787

#### Balance of goodwill by reportable segments

At December 31, 2013 and 2012, the outstanding balance of goodwill by reportable segments was summarized as follows:

Millions of yen						
Year ended December 31, 2013						
Commodity Chemicals	Acrylic Products	Specialty Chemicals	Plastics	Other	Adjustment	Total
¥—	¥—	¥38	¥—	¥—	¥—	¥38
Thousands of U.S. dollars						
Year ended December 31, 2013						
Commodity Chemicals	Acrylic Products	Specialty Chemicals	Plastics	Other	Adjustment	Total
\$—	\$—	\$369	\$—	\$—	\$—	\$369
Millions of yen						
Year ended December 31, 2012						
Commodity Chemicals	Acrylic Products	Specialty Chemicals	Plastics	Other	Adjustment	Total
¥—	¥—	¥38	¥—	¥—	¥—	¥38

#### 31. Amounts per Share

The following table sets forth net income, cash dividends and net assets per share of common stock as of and for the years ended December 31, 2013 and 2012:

	Yen		U.S. dollars
	2013	2012	2013
Net income:			
Basic.....	¥ 36.44	¥ 36.79	\$0.35
Cash dividends.....	10.00	10.00	0.09
Net assets.....	545.45	500.99	5.18

Cash dividends per share represent the cash dividends proposed by the Board of Directors as applicable to the respective years together with the interim cash dividends paid.

## Independent Auditor's Report

The Board of Directors  
Toagosei Co., Ltd.

We have audited the accompanying consolidated financial statements of Toagosei Co., Ltd. and its consolidated subsidiaries, which comprise the consolidated balance sheet as at December 31, 2013, and the consolidated statements of income, comprehensive income, changes in net assets, and cash flows for the year then ended and a summary of significant accounting policies and other explanatory information, all expressed in Japanese yen.

### *Management's Responsibility for the Consolidated Financial Statements*

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in Japan, and for designing and operating such internal control as management determines is necessary to enable the preparation and fair presentation of the consolidated financial statements that are free from material misstatement, whether due to fraud or error.

### *Auditor's Responsibility*

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in Japan. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. The purpose of an audit of the consolidated financial statements is not to express an opinion on the effectiveness of the entity's internal control, but in making these risk assessments the auditor considers internal controls relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### *Opinion*

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Toagosei Co., Ltd. and its consolidated subsidiaries as at December 31, 2013, and their consolidated financial performance and cash flows for the year then ended in conformity with accounting principles generally accepted in Japan.

### *Convenience Translation*

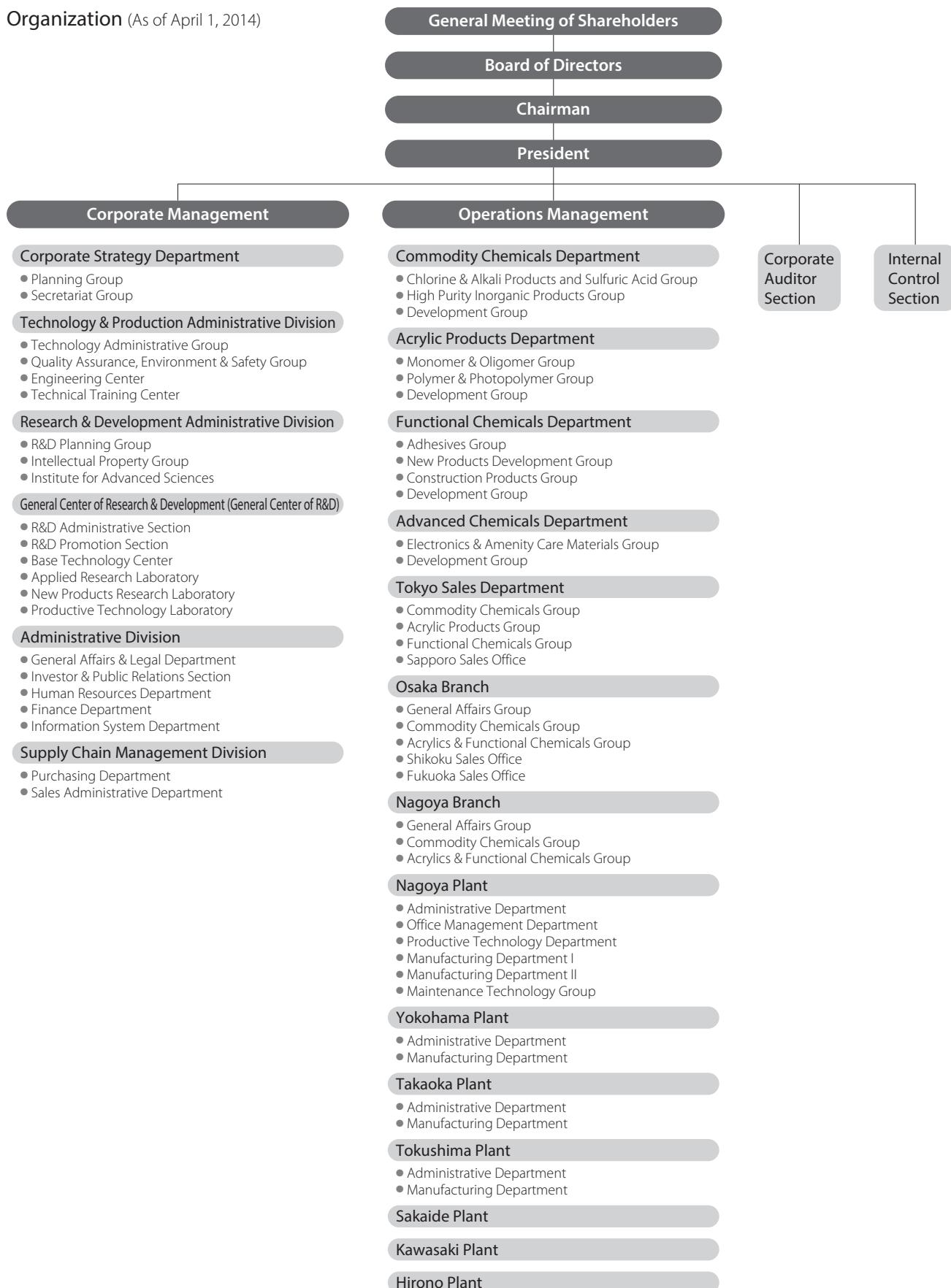
We have reviewed the translation of these consolidated financial statements into U.S. dollars, presented for the convenience of readers, and, in our opinion, the accompanying consolidated financial statements have been properly translated on the basis described in Note 4.

*Ernst & Young Shin Nihon LLC*

March 31, 2014

# Corporate Data

## Organization (As of April 1, 2014)



## Directory

## Domestic Network

**Head Office**

1-14-1 Nishi-Shimbashi, Minato-ku,  
Tokyo 105-8419  
Tel: 03-3597-7215 Fax: 03-3597-7217

**Osaka Branch**

Nakanoshima Mitsui Bldg. 11F, 3-3-3  
Nakanoshima, Kita-ku, Osaka 530-0005  
Tel: 06-6446-6551 Fax: 06-6446-6571

**Nagoya Branch**

Mitsui Life Nagoya Bldg. 6F, 1-4-6 Nishiki,  
Naka-ku, Nagoya 460-0003  
Tel: 052-209-8591 Fax: 052-209-8671

**Shikoku Sales Office**

2-4-1 Showacho, Sakaide, Kagawa 762-0004  
Tel: 0877-46-3300 Fax: 0877-46-3200

**Fukuoka Sales Office**

2-8-30 Tenjin, Chuo-ku, Fukuoka 810-0001  
Tel: 092-721-1902 Fax: 092-721-1914

**Nagoya Plant**

17-23 Showacho, Minato-ku,  
Nagoya 455-0026  
Tel: 052-611-9804 Fax: 052-612-5733

**Yokohama Plant**

1-7 Suehirocho, Tsurumi-ku,  
Yokohama 230-0045  
Tel: 045-503-7300 Fax: 045-502-6960

**Takaoka Plant**

2-1-3 Fushiki, Takaoka, Toyama 933-0195  
Tel: 0766-44-7401 Fax: 0766-44-7410

**Tokushima Plant**

575-1 Nakashima, Kawauchicho,  
Tokushima 771-0188  
Tel: 088-665-2111 Fax: 088-665-6321

**Sakaide Plant**

2-4-1 Showacho, Sakaide, Kagawa 762-0004  
Tel: 0877-46-3161 Fax: 0877-45-4727

**Kawasaki Plant**

7-4 Ukitimacho, Kawasaki-ku,  
Kawasaki 210-0862  
Tel: 044-277-2211 Fax: 044-277-1920

**Hirono Plant**

1-16 Iwasawa, Kamikitasono, Hirono,  
Fukushima 979-0401  
Tel: 0240-28-0111 Fax: 0240-27-4371

**General Center of R&D**

8 Showacho, Minato-ku, Nagoya 455-0026  
Tel: 052-611-9901 Fax: 052-611-1693

**Institute for Advanced Sciences**

2 Okubo, Tsukuba, Ibaraki 300-2611  
Tel: 029-865-2600 Fax: 029-865-2610

## Principal Overseas Subsidiaries

**Toagosei Hong Kong Limited**

Room 607-9, 6/F., No.1 Hung To Road,  
Kwun Tong, Kowloon, Hong Kong  
Tel: 852-2763-1086 Fax: 852-2763-1798

**Taiwan Toagosei Co., Ltd.**

10F-1, No.189, Keelung Rd., Sec2, Taipei, 11054  
Taiwan, R.O.C.  
Tel: 886-2-8732-3677 Fax: 886-2-2378-9036

**Toagosei America Inc.**

1450 West Main St., West Jefferson,  
Ohio 43162, U.S.A.  
Tel: 1-614-718-3855 Fax: 1-614-718-3866

**Toagosei Singapore Pte Ltd.**

460 Alexandra Road PSA Building #22-04  
Singapore, 119963  
Tel: 65-6273-0800 Fax: 65-6273-0500

**TOA-DIC Zhangjiagang Chemical Co., Ltd.**

66 Chanjiang Road, Jiangsu Yangtze River,  
International, Chemical Industrial Park,  
Zhangjiagang, Jiangsu Province, 215633, China  
Tel: 86-512-5893-7320 Fax: 86-512-5893-7321

**Toagosei (Zhuhai) Limited**

1,2,3/F., No.2, Factory Bldg., Xiangzhou Ind.  
Park of Science & Technology, No.2372 Meihua  
West Road, Qianshan, Zhuhai, Guangdong,  
519070, China  
Tel: 86-756-850-8810 Fax: 86-756-850-8906

## Principal Subsidiaries and Affiliates (As of April 1, 2014)

Name of Company	Lines of Business	Our Share (%)	Capital (¥ in millions)
Aronkasei Co., Ltd.	Manufacture & sale of synthetic resin molded products	100.0	¥4,220
Oita Chemical Co., Ltd.	Manufacture of chemical products	91.1	¥450
Toagosei America Inc.	Manufacture & sale of chemical products; technological research	100.0	US\$6,100,000
TG Corporation	Sale of chemical products	100.0	¥174
Toa Logistics Co., Ltd.	Product distribution	100.0	¥16
TOA Engineering Co., Ltd.	Construction & repair of chemical facilities	100.0	¥50
Toa Techno-Gas Co., Ltd.	Manufacture & sale of industrial gases	100.0	¥400
Toa Business Associe Co., Ltd.	Real estate management, brokerage & other services	100.0	¥40
Toa-Jet Chemical Co., Ltd.	Manufacture & sale of chemical products	51.0	NT\$15,000,000
Toa Kogyo Co., Ltd.	Product distribution	100.0	¥25
Taiwan Toagosei Co., Ltd.	Sale of chemical products	100.0	NT\$5,000,000
Aron Packaging Co., Ltd.	Filling & packaging of adhesives	100.0	¥10
Toagosei Singapore Pte Ltd.	Manufacture & sale of chemical products	100.0	S\$60,571,000
Hokuriku Toa Logistics Co., Ltd.	Product distribution	90.0	¥10
Shikoku Toa Logistics Co., Ltd.	Product distribution	70.0	¥10
TOA-DIC Zhangjiagang Chemical Co., Ltd.	Manufacture & sale of chemical products	60.0	US\$5,600,000
Toagosei Hong Kong Limited	Sale of chemical products	100.0	HK\$10,988,000
Toagosei (Zhuhai) Limited	Manufacture & sale of adhesives	100.0	HK\$9,188,000
MT AquaPolymer, Inc.	Manufacture & sale of chemical products	51.0	¥460
Mikuni Plastics Co., Ltd.	Manufacture & sale of synthetic resin molded products	100.0	¥315
MT Ethylene Carbonate Co., Ltd.	Manufacture of chemical products	90.0	¥480
Chubu Liquid Oxygen Co., Ltd.	Manufacture of industrial gases	30.0	¥480
Elmer's & Toagosei Co.	Sale of adhesives	50.0	US\$31,392,000

## Investor Information

### Established

March 1942

### Common Stock

Authorized: 550,000,000 shares

Issued: 263,992,598 shares

Capital: ¥20,886 million

Number of shareholders: 22,111

Listings: Common stock listed on the first section of the Tokyo Stock Exchange

### Transfer Agent for Common Stock

Sumitomo Mitsui Trust Bank, Limited

1-4-1 Marunouchi, Chiyoda-ku, Tokyo 100-8233

### Certified Accountants

Ernst & Young ShinNihon LLC

Hibiya Kokusai Bldg., 2-2-3 Uchisaiwai-cho  
Chiyoda-ku, Tokyo 100-0011

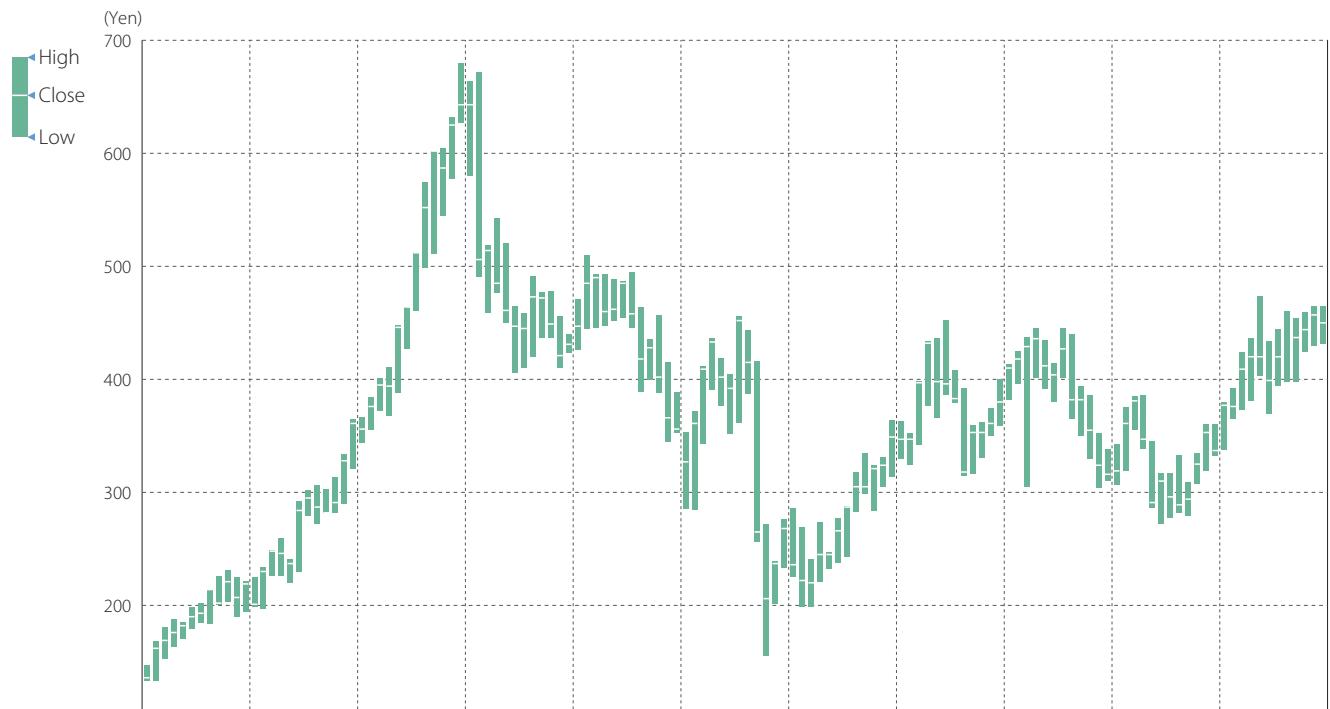
### Major Shareholders

	(%)
Japan Trustee Services Bank, Ltd. (Trust account)	4.46
Sumitomo Mitsui Banking Corp.	4.42
The Master Trust Bank of Japan, Ltd. (Trust account)	3.40
Business Partner Shareholders' Committee	2.92
Employee Shareholders' Committee	2.35
The Bank of Tokyo-Mitsubishi UFJ, Ltd.	2.14
The Chase Manhattan Bank, N.A. London SL Omnibus Account	1.60
The Norinchukin Bank	1.50
Mitsui Life Insurance Company Limited	1.40
Bank of New York Mellon SA/NV 10	1.37

(As of December 31, 2013)

### Stock Price Range & Trading Volume

(Tokyo Stock Exchange)





1-14-1 Nishi-Shimbashi, Minato-ku,  
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