

CSR REPORT 2017

Corporate Social Responsibility Report 2017



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Management Policies

Work hard to be a forward-looking organization by staying on the cutting edge

Be a respected member of the world community

Corporate Profile

(as of March 31, 2017)

Name: ADEKA CORPORATION
 Established: January 27, 1917
 President and Chief Executive Officer: Akio Kohri
 Head Office: 7-2-35 Higashi-ogu, Arakawa-ku, Tokyo
 Capital Stock: 22.899 billion yen
 Shares Issued: 103,651,442
 Number of Employees: 3,375 (consolidated)
 Business: Chemicals, Foods, and Other Business

Editorial Policy

We publish the ADEKA Group CSR Report every year to communicate information to our diverse group of stakeholders about our corporate activities and future direction, as we strive toward a sustainable future hand in hand with society. The ADEKA Group CSR Report 2017 focuses on matters of particular significance from the numerous initiatives undertaken in fiscal 2016.

Details about environment-related initiatives are also available on the CSR section of our website. Going forward, in order to draw up reports that are easy to understand for all our stakeholders, we welcome your candid feedback and opinions using the questionnaire enclosed at the end of this report.

Scope Covered by This Report

This Report covers the whole ADEKA Group. Where necessary, “ADEKA Group” and “the Group” refer to the entire ADEKA Group, while “ADEKA” and “the Company” refer to ADEKA Corporation.

Period Covered by This Report

Fiscal 2016 (April 1, 2016 to March 31, 2017)

Some parts of this report refer to recent activities taking place in fiscal 2017.

Reference Guidelines

Environmental Reporting Guidelines (Fiscal Year 2012 Version) of the Japan Ministry of the Environment
 Japanese Standards Association ISO 26000:2010 Guidance on social responsibility
 The G4 Sustainability Reporting Guidelines of the Global Reporting Initiative (GRI)

Published: July 2017

Next publication date: September 2018

For more information about the ADEKA Group, please visit the following websites.

CSR: <http://www.adeka.co.jp/csr/en/index.html>
 IR: <http://www.adeka.co.jp/en/ir/index.html>

About the Sustainable Development Goals (SDGs)

The SDGs were adopted in September 2015 at the United Nations (UN) summit on sustainable development. They were incorporated into “Agenda 2030” as 17 Goals and 169 Targets that should be attained by 2030. All United Nations (UN) member countries will strive to address these themes between 2016 and 2030 through public and private sector collaboration. Please see page 11 for the SDGs that are relevant to ADEKA Group operations.

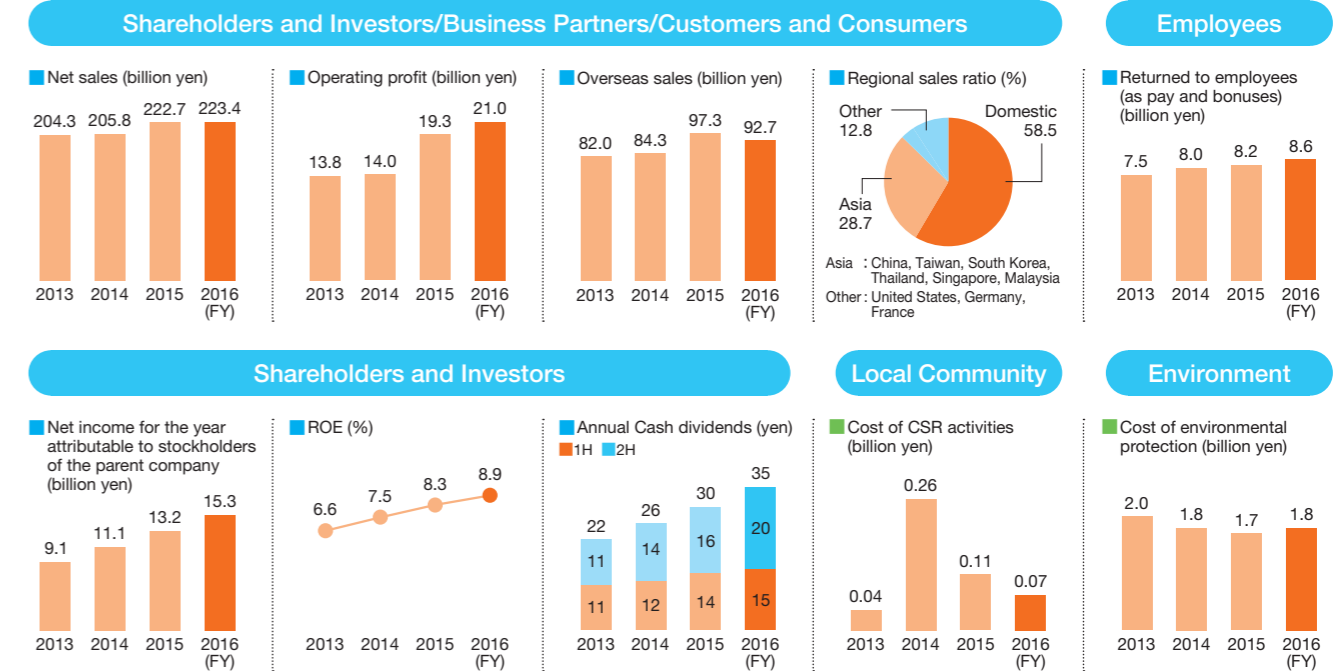
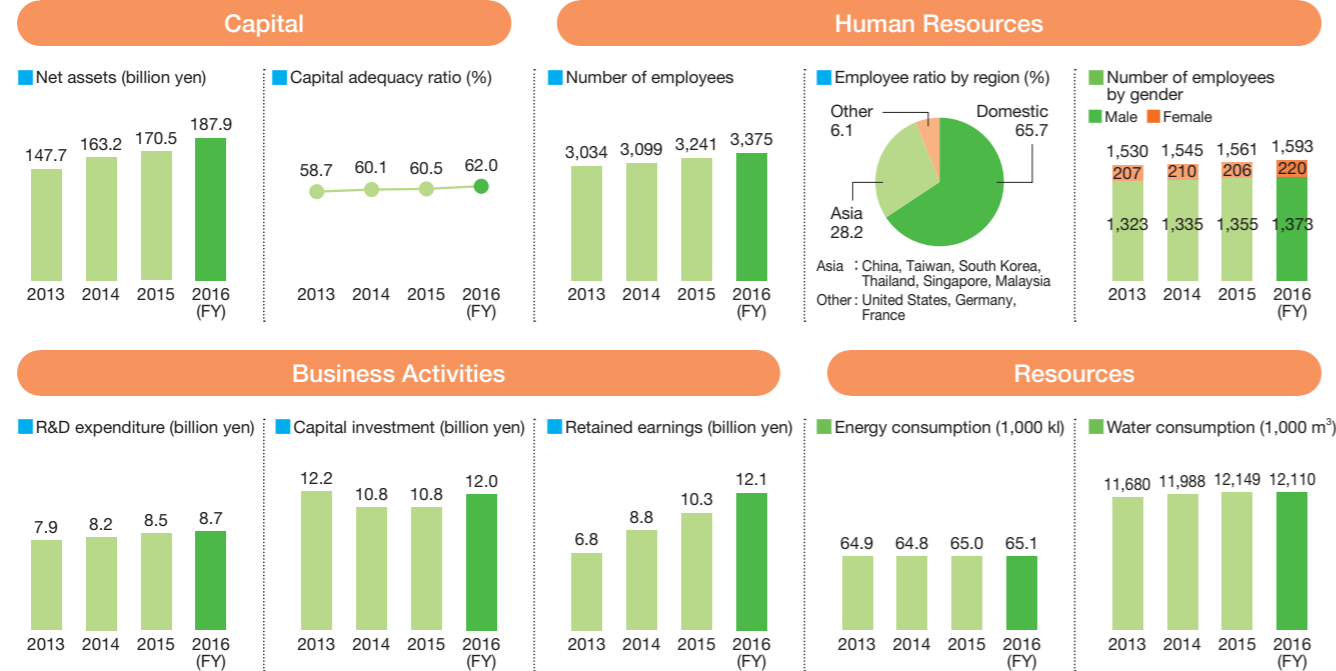


Financial and Non-Financial Data

Value that ADEKA distributed in Fiscal 2016



■ ADEKA Group ■ ADEKA Please refer to page 7 for consolidated companies.



Looking at the next 100 years and beyond, and filled with dreams, ADEKA is demonstrating “ADEKA *rashisa*”, its unique strength, toward creating a more affluent and sustainable society.



A Driving Force Throughout Our Century-Long History

ADEKA was established on January 27, 1917 with the mission of domestically producing caustic soda, a chemical used in many industries at the dawn of Japan's chemical industry, which at the time depended on imports. I am grateful for all the support from customers and stakeholders that have enabled us to achieve our 100-year milestone.

Looking back at our extensive history, I realize that the company's sense of mission since its founding, expressed as “Commit to the improvement of people's lives and development of society,” has been propelling ADEKA forward in its steady progress. This is now incorporated into our management policy, “Work hard to be a forward-looking organization by staying on the cutting edge” and “Be a respected member of the world community.”

ADEKA has continually leveraged its proprietary technologies to create products and services that society and individuals need as well as to advance into new domains and accelerate its overseas expansion. Our steadfast spirit to flexibly identify and consistently challenge business environment changes has been the driving force behind our growth.

ADEKA's Next 100 Years

Following its first 100 years, ADEKA is taking a new step forward to open the way into the next century of its journey. “ADEKA VISION 2025” expresses how we see ourselves in the year 2025 as we strive to become a global company that creates value for tomorrow and contributes to affluent lifestyles through innovative technologies.

To realize that vision, we formulated the mid-term management plan “STEP 3000 – II” for the three years of fiscal 2015 to 2017. It includes our goal of becoming “a good (sound) company” with 300 billion yen in net sales under these basic strategies: expanding the scope of our business and our service region by broadening our core businesses centered on polymer additives and food products, developing information and electronics domains as a third core business, and developing new business in the fields of life sciences, the environment and energy.

I believe that the source of our future growth is ADEKA's unique strength, consisting of co-creation, technology, and trust. This “co-creation” means creating new value together with stakeholders, including Group employees, and the essence of co-creation is technology and trust. Technology certainly underlies ADEKA growth, and all of our employees are committed to self-improvement by acquiring leading technologies and expertise. For the mid-term management plan, we established a method with implementation steps for collecting detailed information on stakeholder needs, stringently selecting potential business seeds during research and development, and finally enabling these seeds to bloom as commercial products. The element of trust clearly arises from the collective efforts of all employees who face challenges head on. We will share the unique strength of ADEKA across the entire Group and, by doing so, generate synergies and virtuous cycles that further ensure we become the company we envision for 2025.

Creating an Affluent, Sustainable Society

In recent years, issues associated with globalization are increasingly complex and diversified. Consequently, the United Nations (UN) adopted Sustainable Development Goals (SDGs) to invite all member countries to join hands in tackling issues such as eradicating poverty and hunger, ensuring global environmental conservation, and respecting human rights. As public institutions and members of international society, companies must live up to their responsibilities and address social issues. ADEKA will fulfill its responsibility by promoting compliance-oriented management with the combined force of global human resources with diverse backgrounds and personalities.

The keys to realizing this vision lie in the provision of advanced materials and solutions unique to ADEKA. With the goals of coexistence and co-prosperity with society, we intend to gently harmonize the uniqueness of ADEKA with individuals and society. Moreover, we will endeavor to deliver the value of contributing to the resolution of global social issues as well as economic value and extend every effort to creating an affluent and sustainable society.

Akio Kohri
President and Chief Executive Officer

ADEKA in Our Lifestyles

Since its foundation, the ADEKA Group has continued to develop proven technologies now used for many aspects of our daily lives. We remain committed to bringing together all of these technologies toward developing new products and technologies vital for a healthy, affluent society and the environment.



1 For Healthy Lives

Surfactants
Body and facial creams, emulsions, lotions, etc.

Propylene glycols
Detergents, shampoos, pharmaceutical products, etc.



5 On Your Favorite Bread

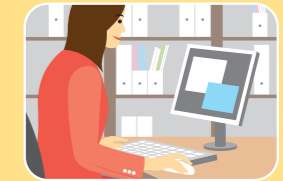
Margarine, shortenings, etc.
Making baked goods fluffy and moist



6 In All Corners of the Office

Polymer additives (flame retardants)
Improving the flame retardant property of plastics

Hydrogen peroxide
Bleaching of raw materials used in papermaking, etc.



2 Used as Paint for Construction and Civil Engineering

Epoxy resins, urethane resins
Anticorrosive, dust-proof paint for metals and concrete



3 On Your Cars

Polymer additives
Reducing the weight of vehicles

Lubricant additives
Improving fuel efficiency and reducing CO₂ emissions



4 On the LCD Screens of Flat-Screen Television Sets

Flat panel display materials
Enhancing the performance of video equipment

Photo (Light)/Thermal curing resin
Innovation of manufacturing technology



7 On Your Smartphones

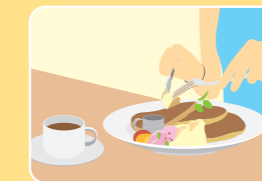
Semiconductor materials
Enhancing the performance of electronic equipment and reducing power consumption

Circuit materials
Improving the quality of optical communication equipment



8 In Delicious Desserts, Too

Whipping cream, etc.
Improves the milky flavor and melt-in-the-mouth texture that makes desserts moist and delicious



9 Building Infrastructure that is Stronger and More Robust

Water swelling sealing materials
Sealing materials, used in concrete structures, to prevent water leakage, etc.



Chemicals Business

IT Related Chemicals

The ADEKA Group provides products for various electronic devices such as LCD TVs, PCs, and smartphones, using cutting-edge technologies. In particular, its semiconductor materials are at the highest level of quality in the world.

- Semiconductor materials
- Photo (Light)/Thermal curing resin
- Display materials
- Circuit materials

Functional Chemicals

Polymer additives are essential for highly-functional plastic. As an all-round manufacturer for polymer additives, the ADEKA Group manufactures various kinds. The Group also provides additives for automobile engine oils, developed with ADEKA's unique technology, as well as highly-functional cosmetics materials.

- Polymer additives
- Surfactants
- Lubricant additives
- Epoxy resins, urethane resins

Commodity Chemicals

From daily necessities such as soaps and detergents to IT electronics, the ADEKA Group provides products for a wide range of fields while contributing to the development of industries. Also, we were first in Japan to produce propylene glycols, used for cosmetics.

- Propylene glycol
- Hydrogen peroxide
- Water swelling sealing materials

Food Business

Guided by our brand slogan, "The Delicious Taste You Can Rely On," ADEKA develops food ingredients that are constantly at the forefront of the industry. We provide processed oil and fats as well as processed foods to bread, confectionery, and pastry manufacturers while at the same time contributing to the realization of a safe, reassuring dietary life.

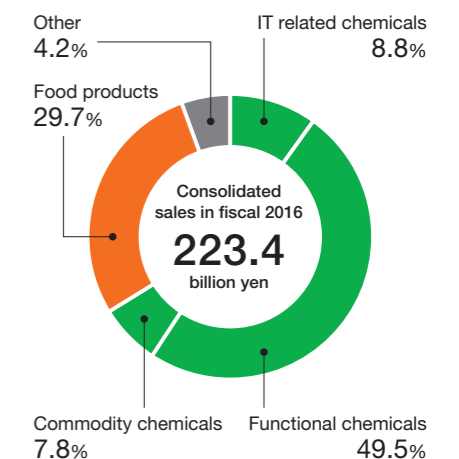
- Margarine, shortenings
- Fats and oils for chocolate
- Whipping cream
- Frozen pie crusts

Other

Our other business primarily includes the maintenance of ADEKA Group plants and facilities, design of various kinds of plants, logistics, and an insurance agent business. The Group provides services to customers in various fields and based on expertise related to those operations.

- Plant design and construction management
- Logistics
- Real estate
- Insurance agent

Consolidated Sales by Business

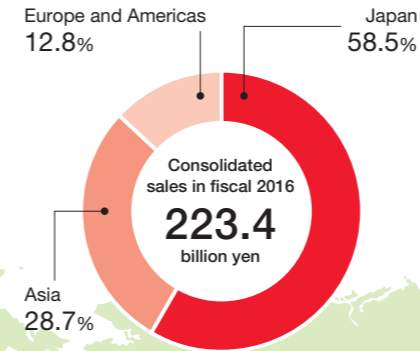


ADEKA Group Network

As a company that coexists in harmony with the global community, we work together with our domestic and overseas networks to expand our business areas and aggressively develop our overseas operations.

- Chemicals business
- Food business
- Other business
- ★ : Consolidated

Regional Sales Ratio



Europe

- ADEKA PALMAROLE SAS★
- ADEKA Europe GmbH★



ADEKA PALMAROLE SAS



Americas

- AMFINE CHEMICAL CORP.★
- ADEKA USA CORP.★
- AM STABILIZERS CORP.★
- ADEKA BRASIL LTDA.



AMFINE CHEMICAL CORP.



Middle East

- ADEKA AL GHURAIR ADDITIVES LLC



ADEKA AL GHURAIR ADDITIVES LLC

Asia

- ADEKA (CHINA) CO., LTD.★
- KUKDO CHEMICAL (KUNSHAN) CO., LTD.
- ADEKA FINE CHEMICAL (SHANGHAI) CO., LTD.★
- ADEKA FINE CHEMICAL (CHANGSHU) CO., LTD.★
- CHANG CHIANG CHEMICAL (SHANGHAI) CO., LTD.
- ADEKA FOODS (CHANGSHU) CO., LTD.★
- ADEKA FINE CHEMICAL (ZHEJIANG) CO., LTD.
- CHANG CHIANG CHEMICAL CO., LTD.★
- ADEKA FINE CHEMICAL TAIWAN CORP.★
- ADEKA INDIA PVT.LTD.
- ADEKA KOREA CORP.★
- ADEKA FOODS (ASIA) SDN.BHD.★
- ADEKA (SINGAPORE) PTE.LTD.★
- ADEKA (ASIA) PTE.LTD.★
- ADEKA FINE CHEMICAL (THAILAND) CO.,LTD.★
- The Representative Office of ADEKA CORP. in Ho Chi Minh City



ADEKA FINE CHEMICAL TAIWAN CORP.



ADEKA KOREA CORP.

Japan

ADEKA CORP.

Office

- Head Office (Tokyo)
- Osaka Main Branch
- Nagoya Branch
- Fukuoka Branch
- Sapporo Regional Office
- Sendai Regional Office

Plants

- Kashima Plant
- Kashima Plant-West
- Chiba Plant
- Mie Plant
- Fuji Plant
- Akashi Plant
- Soma Plant

R&D Laboratories

- Ogu R&D Laboratory
- Kuki R&D Laboratory
- Urawa R&D Laboratory
- Kansai Food Development Department



Head Office/Ogu R&D Laboratory



Kashima Plant

Domestic Affiliated Companies

- ADEKA CHEMICAL SUPPLY CORP.★
- ADEKA LIFE-CREATE CORP.★
- OXIRANE CHEMICAL CORP.★
- ADEKA CLEAN AID CORP.★
- ADEKA FINE FOODS CORP.★
- ADEKA ENGINEERING & CONSTRUCTION CORP.★
- ADEKA LOGISTICS CORP.★
- ADEKA FOODS SALES CORP.★
- YONGO CO., LTD.★
- UEHARA FOODS INDUSTRY CO., LTD.★
- CROWN CO., LTD.★
- NIHON NOHYAKU CO., LTD.★
- CO-OP CLEAN CO., LTD.★
- SHOWA KOSAN CO., LTD.★
- ASAHI ARCHITECTS OFFICE CO., LTD.
- KANTO SODIUM SILICATE GLASS CO., LTD.
- TOKYO ENVIRONMENTAL MEASUREMENT CENTER CO., LTD.
- MIZUSHIMA PLASTICIZER CO., LTD.



History of ADEKA

ADEKA celebrated its 100th anniversary in 2017 thanks to the support of its stakeholders. We will continue to aggressively take on the challenge of providing solutions for social issues.



1917- Foundation for Developing a Wide Range of Unique Businesses

During a period of increasing demand for paper, including that used for certification stamps and revenue stamps, ADEKA was established in Japan to produce caustic soda, which is used to bleach paper and pulp. Moreover, we utilized by-products generated from the production of caustic soda, such as hydrogen and chlorine, to make hydrogenated oil and soaps, and developed high-quality margarine to supplement nutritional needs. Our products at the time were indispensable to daily life.

1950- Rise of Organic Synthesis Technology

Substances such as propylene glycols and epoxy resins were indispensable for sustaining the foundation of daily life in Japan as the nation experienced rapid economic growth after recovering from the war. We possess a multitude of technologies that were obtained by way of introduction from overseas or from the know-how accumulated since our establishment. These enable us to create a wide variety of products and make up the foundation for our current chemical products and polymer additives businesses.

1970- Pursuing High Value-Added Products that Support Daily Life

With increased public concern about pollution, industries sought to transition to resource-saving or power-saving business models. ADEKA developed a series of products that were technically superior and easy to use by drawing on traditions that had been passed forward since before the Second World War as well as our accumulated technologies. This enabled us to respond better to customer needs and suited the changing times.

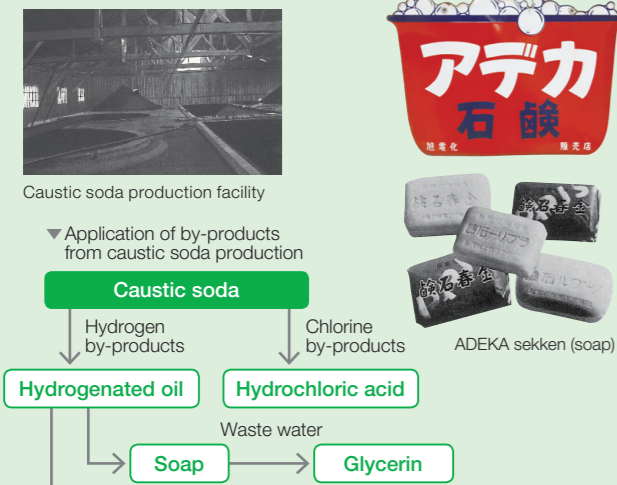
1990-Present Becoming "a Global Good Company" to realize a sustainable society

We will continue to create value by responding to the challenges that our stakeholders face and pursuing technologies that support the next generation. Furthermore, we will accelerate the Group's globalization as a material manufacturer that supports affluent lifestyles.

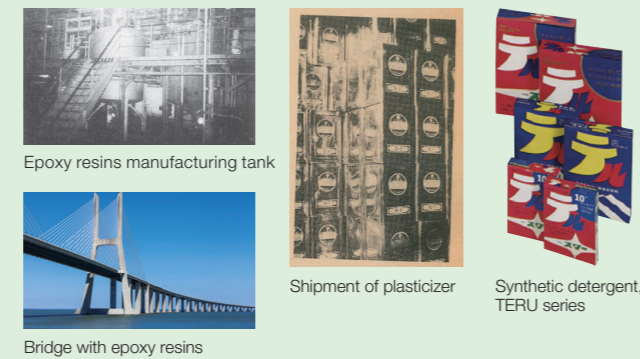


Chemical Business

Domestic production of caustic soda



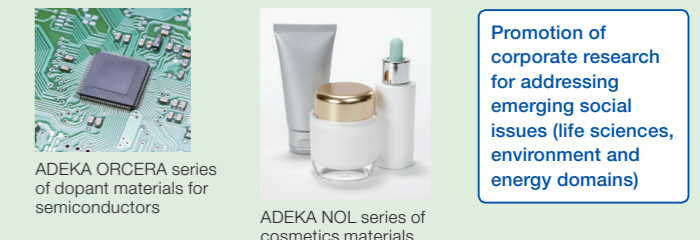
- First polymer additives produced by ADEKA
- Production of propylene glycol for the first time in Japan
- Development and expansion of application of surfactants
- Development and sales of epoxy resins
- Sales of washing machine soaps and synthetic detergents



- Development of lubricant additives for engine oil
- Development of nucleating agents to improve the quality of plastics
- Sales of water swelling sealing materials
- Development of a series of IT related chemicals, including high-purity chlorine



- First to develop a series of environmentally friendly products (lead-free PVC stabilizers, water borne epoxy resins, etc.)
- Development of halogen-free flame retardants that reduce emissions of harmful substances from burning plastics
- Development of high dielectric constant materials essential to miniaturizing and increasing the capacity of semiconductor memory
- Development of light curing resins and photo initiators that contribute to high-definition liquid crystal displays
- Development of materials that add moisture and elasticity to skincare products and cosmetics



Food Business

Margarine



- Production of shortening for the first time in Japan
- Development of functional oil and fat products through applications of vitamization and emulsification technologies



- Development of processed oil and fat that add texture and rich flavor to food
- Popular pre-shaped processed food for bakeries and confectioneries (e.g., frozen pie dough)



- Expanded product line of highly functional margarines that contribute to the authentic flavor of breads and confectioneries as well as quality improvement
- Whipping cream, emulsified using natural ingredient included in milk, was well received for its natural flavor
- Development of functional food materials that have benefits for health or serve as seasonings



- Increased demand for paper and textiles
- Improved domestic manufacturing technologies
- Improved nutrition, health, and hygiene in Japan

- Rapid spread of plastic products
- Shift from coal to oil
- Penetration of Western food culture (breads and cakes)
- Spread of household electrical appliances such as TVs, washing machines, and refrigerators

- Resource-saving and power-saving needs increased in wake of the oil shock
- Surfacing of social issues such as pollution litigation
- Growth of the food-service industry
- Development of high-rise buildings, tunnels, and other urban infrastructure

- Increased environmental awareness
- Spread of digital devices (PCs and mobile phones)
- Spread of convenience stores
- Aging society
- Food safety and health consciousness

ADEKA Group – Creating Value for Society

Since its founding, the ADEKA Group has aspired to make affluent lifestyles through its core business by providing products and services that meet the needs of society.

As our stakeholders' needs become more diversified and our business environment changes daily, we steadfastly develop our businesses by closely monitoring emerging business trends.

Under the mid- to long-term vision ADEKA VISION 2025, formulated in 2015, we are striving to become a global company that creates value for tomorrow and contributes to affluent lifestyles through innovative technologies, as expressed in "Envision for 2025." We seek co-existence and co-prosperity with our stakeholders by harnessing our

accumulated technologies and aggressively expanding our global business.

In recent years, interest in CSR has grown around the world, as evidenced by the United Nation's Sustainable Development Goals (SDGs) and the Paris Agreement under COP21. The ADEKA Group will fulfill its responsibilities as a manufacturer of materials that are essential for enriching people's lives by monitoring its impact across the supply chain and engaging in frequent dialogue with stakeholders. We will create value for society through our business and the efforts of each ADEKA Group employee toward bringing about a sustainable society.

The ADEKA Group will meet stakeholder expectations through its CSR activities.



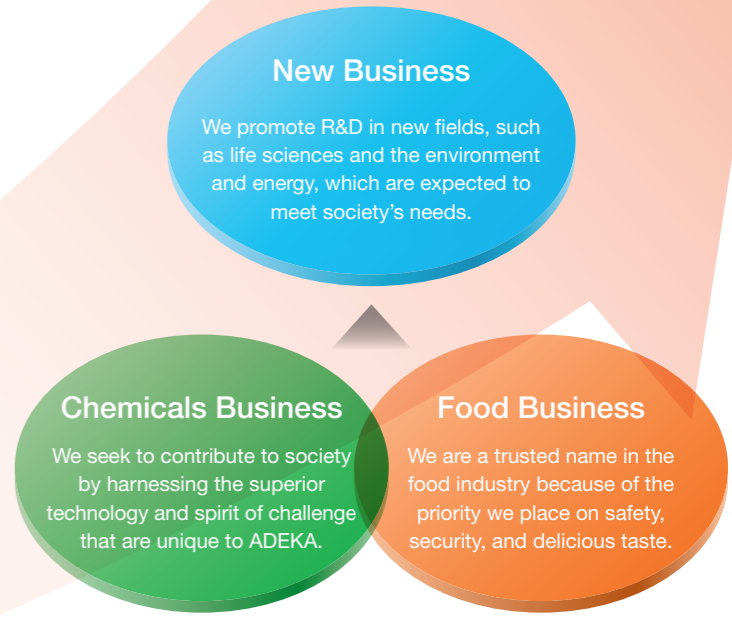
Envisioned Ourselves for 2025

ADEKA VISION 2025

A global company that creates value for tomorrow and contributes to affluent lifestyles through innovative technologies

Mid-term Management Plan "STEP 3000-II"

Social Charity through Our Core Business



Social Charity through Our Core Business

Co-Existence and Co-Prosperity with Society

Fundamental CSR Policy

- Gentle Harmony between People and Technology
- Harmony with Society

Contributing to Society through CSR

Relevance to SDGs



Product Safety ▶ P. 23

We exercise uncompromising care in our quality control system and supply chain management to deliver safe, high-quality products across the globe.

Environmental Conservation ▶ P. 25

We reduce the environmental impact of our manufacturing processes and develop and manufacture eco-friendly products.

Working Environment ▶ P. 29

We respect the diversity and individuality of our employees and strive to create a pleasant corporate culture that encourages them to excel.

Occupational Health and Safety ▶ P. 33

We place top priority on safety and security to achieve zero industrial accidents, enhance employee awareness on safety, and create safe workplaces.

Stakeholders ▶ P. 35

We contribute to addressing social and environmental issues by communicating with various stakeholders.

ADEKA Group Code of Conduct

1. Abide by laws and regulations in all corporate activities and conduct fair business in an ethical manner
2. Provide safe and high-quality products and services
3. Be serious about preserving the environment
4. Engage in open and friendly communication and activities to serve the interest of society and to maintain its trust
5. Foster corporate transparency by truthfully and accurately disclosing information regarding our business activities
6. Maintain a safe and healthy working environment for our employees
7. Do not tolerate antisocial forces or behavior
8. Strive to achieve sustainable growth and success for the benefit of society

Compliance

ADEKA Group Code of Conduct
<http://www.adeka.co.jp/company/action.html> (in Japanese only)

Progress Report on Mid-term Management Plan “STEP 3000-II”

The ADEKA Group formulated ADEKA VISION 2025 as a mid- to long-term vision for becoming a company as expressed in “Envisioned for 2025.” To achieve its objectives, the company launched the mid-term management plan STEP 3000-II in 2015 to guide the plan’s first three years. In fiscal 2017, the final year of STEP 3000-II, we will pursue initiatives based on our Basic Strategies and Three Basic Policies toward our goal of becoming “a good company” with 300 billion yen in net sales.

Envisioned for 2025

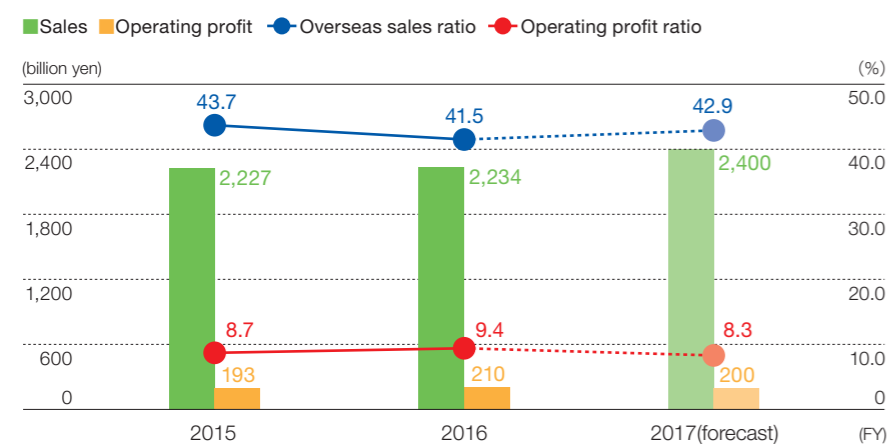
ADEKA VISION 2025

A global company that creates value for tomorrow and contributes to affluent lifestyles through innovative technologies



Progress Report on Management Targets

Results



FY2017 Targeted results

Item	Target
Sales	300 billion yen
Overseas sales ratio	50.0%
Operating profit	24 billion yen
Operating profit ratio	8.0%

Results of Major Initiatives

Basic Strategies

1. Expand business with a special focus on core businesses

- Polymer additives**
- Expanded business bases, including the establishment of a representative office in Ho Chi Minh City, Vietnam, and ADEKA FINE CHEMICAL (ZHEJIANG) CO., LTD., a manufacturing and sales subsidiary of chemical products in China.
 - Increased production capacity, mainly in the United States and France.
- Food products**
- Completed a new manufacturing plant for processed oils and fat products at the Kashima Plant.
 - Turned CROWN CO., LTD. into a consolidated subsidiary and strengthened its sales system.
 - Expanded production capacity in China and Southeast Asia.
 - Established the Overseas Food Development Office in the ADEKA Food Development Laboratory to develop food products for overseas markets.

2. Develop a third core business

- Electronics and IT materials**
- Established the R&D department at ADEKA FINE CHEMICAL TAIWAN CORP. and strengthened its technical service system.
- IT materials**
- Increased production capacity for materials used in semiconductor memory in Japan and South Korea.
 - Promoted development of next-generation semiconductors that meet high definition requirements.

3. Create new businesses and expand into other fields

- Life sciences**
- Developed products including next-generation material for decellularized regenerative medicine and adjuvants for nasal absorbing vaccine, which prevents influenza infection.
- Environment and energy**
- Acquired an exclusive license to use a patented production technique for graphene from the University of Tokyo and began supplying samples.
 - Participated in NEDO’s “Advanced research program for energy and environmental technologies” and developed an epoxy resin that may be applied to fiber-reinforced plastics for the blades of large-scale, next-generation windmills.

Basic Policies

Strengthened Global Accounting
Began operating a global consolidated business management system that provides centralized control of business data for the entire Group, enabling rapid monitoring of business data at consolidated subsidiaries.
Developed a global procurement system. ▶ P. 36

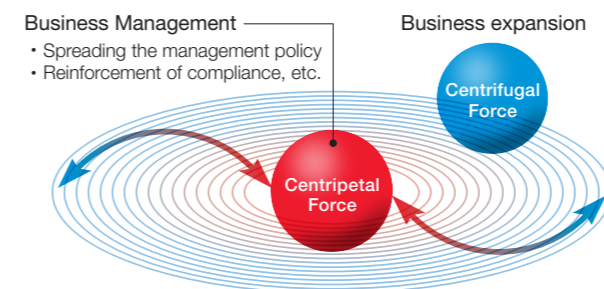


Introduced Stage-Gate for research management
Shared in-house technology through themed discussion sessions.
Established a dedicated division for strengthening marketing functions. ▶ P. 17

Developed global human resources (cultivating global human resources through selected employees and an overseas training program).
Cultivated locally hired employees (training for locally hired employees in Japan). ▶ P. 32

Strengthening Global Business Management

In order to strengthen the increasingly complex management of the ADEKA Group in tandem with the growth of our business, we adopted a two-pronged approach of pursuing an expansion strategy (centrifugal force) and tightening the reins of business management (centripetal force).



Spreading ADEKA’s Management Policies and Unique Strengths

We distributed posters, cards, and booklets in eight languages to all Group locations and employees to

enhance understanding of the Management Policies, which outline the Group’s universal and absolute values, its direction and reason for existence, and the unique strength of ADEKA, which is called “ADEKA *rashisa*” representing our positive corporate culture.

Reinforcing Compliance

We translated the ADEKA Group Code of Conduct into eight languages and distributed posters, cards, and booklets in eight languages to all Group locations and employees to cultivate an organizational culture that prevents misconduct. Also, we formulated the ADEKA Group Management Regulations and confirmed the current status of internal regulations at each affiliated company, and then identified regulations to be shared among all Group companies. Looking ahead, we will support affiliated companies in Japan and overseas to establish their regulations in an effort to optimize operational management across the Group.

ADEKA—Onward to the Next

100 Years

ADEKA aspires to create value for tomorrow. For that reason, we will continue to develop innovative technologies and to accumulate know-how based on experience to address social issues and meet expectations over the next 100 years.

Meeting society's expectations with innovative technology

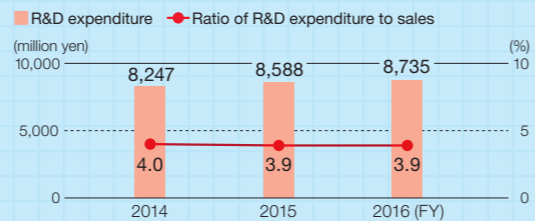


ADEKA's R&D

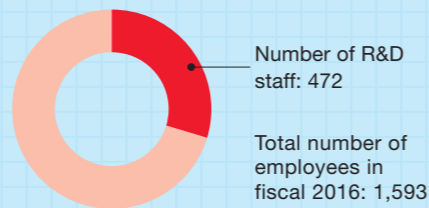
ADEKA aspires to contribute to affluent lifestyles through innovative technologies, and the engine that drives us toward this goal is our robust R&D.

Our eight research laboratories develop basic technologies across broad areas of chemicals and food. Moreover, we seek to integrate technologies beyond our current expertise so that we can take on the challenges of promising growth areas, such as IT related chemicals, life sciences, and environment and energy.

▶ ADEKA Group's R&D Expenditure and Ratio of R&D Expenditure to Sales



▶ Ratio of R&D Staff to Total Employees (ADEKA)



R&D Laboratories and Research Themes

Polymer Additives R&D Laboratory (Urawa)	Additives for polyolefin, PVC stabilizers, Plasticizers, Flame retardants
Information Media Materials Development Laboratory (Ogu)	Photo (Light)/Thermal curing resin, Photoinitiators, Imaging materials
Electronic Materials Development Laboratory (Ogu, Kuki)	Semiconductor materials, Etching materials, Sheet materials for packaging
Functional Chemicals Development Laboratory (Ogu)	Surfactants, Lubricant additives, Functional cosmetic ingredients, Water borne resins
Functional Polymers Laboratory (Kuki)	Epoxy resins, Polyurethane raw materials, Epoxy resin adhesives
Food Development Laboratory (Ogu, Kansai)	Margarine, Shortenings, Filling cream, Whipping cream, Baking mayonnaise, frozen dough
Life Science Materials Laboratory (Ogu)	β-glucan, Mevalonolactone, Regenerative medicine materials
Environmental & Energy Materials Laboratory (Ogu)	Graphene, Materials for rechargeable batteries and organic solar batteries

1

Development of SAPS-Free Extreme-Pressure Agent

The Challenge

Preventing wear and seizure of metal parts

While extreme-pressure agents are a typical solution for wear and seizure, these lubricant additives contain sulfur, phosphorous, and other metals known as SAPS, which produce side effects such as degraded performance of peripheral devices in automobile engines.

The Solution

An innovative lubricant additive that reduces wear and is gentle to metals

Many research labs and corporations have put a lot of effort into developing SAPS-free extreme-pressure agents, but none of these offer dramatic improvements in functionality as compared to conventional agents. ADEKA, however, has surmounted formidable technological obstacles through joint research with Professor Masayoshi Muraki at the Shonan Institute of Technology and Dr. Nakamura at the Tokyo Metropolitan Industrial Technology Research Institute, and received the Japanese Society of Tribologists Technical Award in May 2016. We plan to commercialize the results of this research for use as lubricants for automobile gears and engines to enhance the performance and prolong the life of various metal parts while creating a safer, more energy-efficient society.



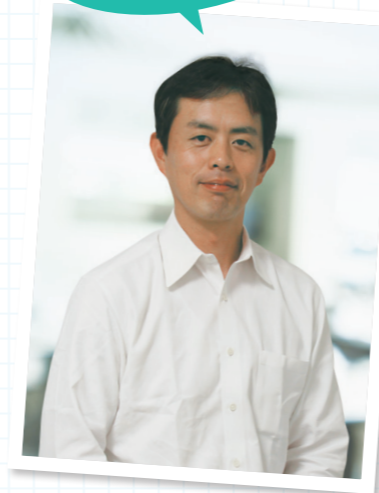
Kenji Yamamoto
Lubricants Department
Functional Chemicals
Development Laboratory



Japanese Society of Tribologists
Technical Award

We surmounted technological obstacles

This is one of the world's top energy-saving technology



Ryo Ogawa
Functional Polymers Laboratory



2

Commercializing the World's First Energy-Saving Laser Curing Adhesive

The Challenge

Creating higher performing adhesives

The expanding functionality of automobiles has led to internal parts with higher precision and sophistication. These changes in turn require more reliable and efficient adhesives for processing the parts to ensure automotive safety.

The Solution

Proprietary technology for efficiently achieving adhesive strength

ADEKA and DENSO Corporation jointly developed a new adhesive system for fastening epoxy resins that uses infrared laser irradiation to achieve snap curing. Compared with conventional adhesion methods, the system shortens the time required for curing, achieves stronger adhesion, and accelerates the parts manufacturing process, thereby realizing world-class energy savings. Production of the new adhesive was made possible by harnessing technologies we have accumulated over the years to review material design at the molecular level, as well as the advanced manufacturing technology we have cultivated in the areas of IT and electronic chemicals. In 2016 we received the DENSO CORP. Technological Development Award. We intend to make this technology available for enhancing the functionality and reducing the weight of automobiles and thereby contribute to the creation of greater convenience and a safer society.

ADEKA—Onward to the Next 100 Years

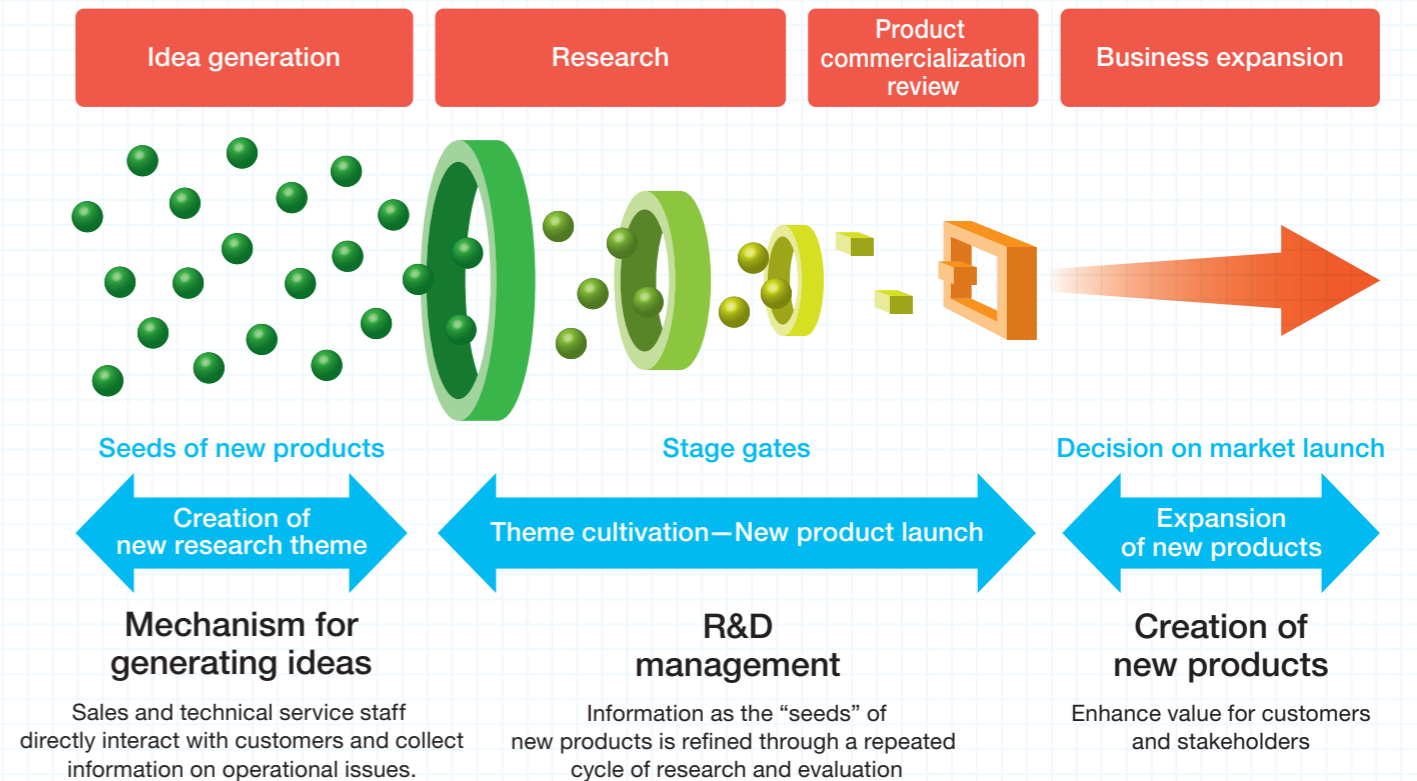
Open up the future filled with dreams by our innovative technology

Stage-Gate process for Research Management

Stage-Gate is an R&D management process for delivering products with true value to society by refining the development theme at “gates” set at each stage of product development up to commercialization. ADEKA has set gate requirements for idea generation, research, product commercialization review, and business expansion. The director heads of the research laboratories

responsible for unrelated areas, and the general manager of business planning, serve as gate keepers and hold meetings to objectively decide whether a project should advance to the next stage. Since gate requirements include product marketability, technological trends, and competition, we also established a dedicated marketing research group to increase decision-making accuracy.

Stage-Gate Process



Voice

From the site of the Stage-Gate process, we present the insights and learnings of the executive officer in charge, sales representative, and a researcher.



Atsuya Yoshinaka
Operating Officer and General Manager, R&D Planning Dept.

1

Making a United Effort to Nurture the Seeds of Innovation and Create New Products

Technology is the driving force of ADEKA's growth, and it's no exaggeration to say that our future depends on creating more and more new products that benefit society. The key to this lies in multiplying the “seeds” of new products and enhancing the efficiency and probability of nurturing those seeds into new products. Therefore, we introduced the Stage-Gate process and sought to reinforce our marketing functions.

As part of this initiative, in fiscal 2016 we began holding discussions on specific themes to apply the expertise of our eight research laboratories by having them introduce their specialized technologies and new materials to each other. I particularly hope this will provide an opportunity for young researchers to learn about fields unrelated to their own and discover ideas for new seeds.

In another initiative, the needs picked up by our sales and technical service staff through casual conversation with customers are collected and organized by the planning department to be shared across the company and turned into development themes. We hope to set in motion a vigorous cycle that includes providing feedback to customers and identifying their emerging needs. We will make a united effort to boost the creation of new products so that one day we can earn the gratitude of people all over the world.

2

Raising an Antenna to Sense Customer Needs as a Sales Staff

I sell epoxy resin, a material used in products such as adhesives for automobiles and electronic materials. As a sales person, I'm in close contact with customers and try to understand and integrate the various challenges they face in order to identify the needs of the entire market. I share information about these needs with R&D and technical service staff and cooperate with them in our quest to develop promising new products that satisfy our customers. In addition, I always keep my antenna up, so to speak, for a sense of the burgeoning trends among automobile and electronics manufacturers, which are my customers' customers, so I can anticipate and respond to their emerging needs.



Yui Asuka
Group-3 Commodity Materials Dept.

3

Developing Products by Listening to the Voice of the Market from an Engineer's Standpoint

Our technical service involves directly interacting with customers in Japan and abroad both not only to introduce new products, but also to discuss the challenges our customers face. This allows us to develop a total solution from an engineer's standpoint. We also play the key role of relaying actual feedback from our customers and market trends to the R&D team, which leads to the development of new products that provide value to society. The job gives me a sense of reward and satisfaction commensurate with the heavy responsibility. I always do my best to absorb knowledge for precisely responding to any situation and therefore fulfill my role as the public face of ADEKA by responding quickly and accurately.



Yota Tsuneizumi
Additives Solution Dept.,
Polymer Additives R&D Laboratory



Governance

The ADEKA Group, under its management policies based on “Contributing to society through our business” and “Realizing harmony and co-prosperity with society,” strives to meet the expectations and demands of society and consistently enhance its brand and corporate value by reinforcing its corporate governance and rigorously managing compliance.

Corporate Governance

•Basic Stance on Corporate Governance

The ADEKA Group recognizes that reinforcing its corporate governance is a top management priority for realizing its corporate mission and management policies and for achieving sustainable growth and enhancing its mid- to long-term corporate value.

•Corporate Governance Structure

ADEKA believes that a decision-making process centered on consultation by the board of directors and a corporate governance structure with an audit and supervisory board provide the optimal system for effective management. The company has also introduced a corporate officer system to clearly define the responsibility and authority involved in operational execution, accelerate decision making, and efficiently manage business operations.

Key management issues are determined by the board of directors following deliberation by the Management Committee, comprising full-time directors and corporate officers. This ensures the transparency, sufficiency, and validity of decision making as well as mutual oversight between directors and corporate officers.

The 11 members of the board include 2 independent

external directors who offer advice on achieving sustainable growth and enhancing corporate value over the mid- to long-term while also overseeing management from an independent, objective standpoint.

The 5 corporate auditors include 3 independent external members of audit and supervisory board who objectively oversee the execution of operations by directors.

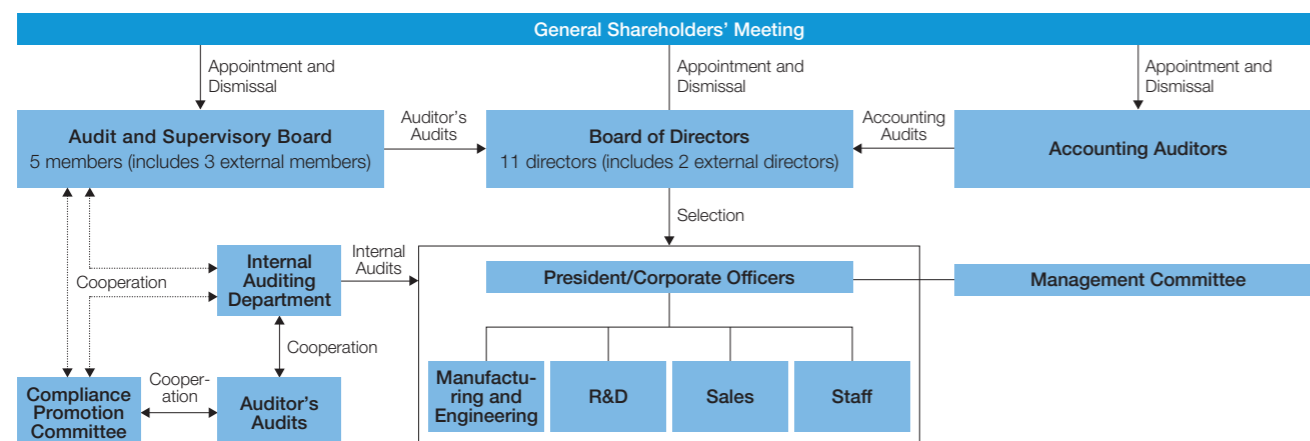
•Compliance with Corporate Governance Code

In consideration of the intent and purpose of the Corporate Governance Code, adopted in June 2015, the ADEKA Group Corporate Governance Guidelines were laid down in order to raise the level of governance across the Group by constructing a highly effective system of corporate governance. This allows each organizational entity, including the board of directors and the audit and supervisory board, as well as executives and employees, to fulfill their respective roles.

The ADEKA Group will aim for sustainable growth through the practical application of these guidelines to realize transparent, fair, speedy, and bold management.

 [ADEKA Group Corporate Governance Guidelines](http://www.adeka.co.jp/ir/library/pdf/cgg.pdf)
<http://www.adeka.co.jp/ir/library/pdf/cgg.pdf>
 (in Japanese only)

► Overview of Corporate Governance as of June 30, 2017



•System for Providing Information and Support to External Officers

The ADEKA Group has established a support system for external officers so they can deepen their understanding of the Group's business activities and make accurate decisions.

Soon after officers are appointed, the Group holds an orientation session on the Group's businesses and financial conditions and organizes tours of its facilities as needed. Reference materials for meetings of the board of directors are distributed and important issues are explained by the



External officers inspecting a Group company in China

secretariat in advance to ensure that external officers are fully briefed and can engage in constructive discussion.

In fiscal 2016, the external officers visited 5 Group companies in China and inspected the business management and operational status of production facilities at each company. They also toured the planned site for construction of the head office and plant of ADEKA FINE CHEMICAL (ZHEJIANG) Co., Ltd., a newly established subsidiary. The visits provided deeper insight into overseas business activities, a current focus of the ADEKA Group.



External officers touring the planned site of a plant in China

VOICE

Seeking Sustained Enhancement of Corporate Value

Kazuyuki Nagai
External Director



Companies are expected to comply with external laws and regulations including corporate governance code and stewardship code, establish a governance system, and effectively respond to any issue that may arise. And so they must also clearly confirm their basic management strategies and secure an effective governance system for pursuing those strategies.

ADEKA aspires to be a company that fulfills its social responsibilities while seeking to sustainably enhance its corporate value. To this end, the company must ensure that its board of directors and executive system are capable of implementing business strategies for achieving the sustained long-term enhancement of its corporate value, overseas business development, and M&A and focus on core competence. At the same time, ADEKA should raise company-wide awareness of the need to fulfill social responsibilities that are associated with doing business and required by society.

I intend to firmly fulfill my expected role as an external director to establish such a governance system.

VOICE

Bolstering Sound Management

Hironori Yano
External Director



Companies that genuinely want to contribute to society must uphold their corporate and management principles and maintain a long-term outlook of the bigger picture.

Sound management is evidenced by sound financial results, assets, and credit. The long-term future of a company depends on its social credibility that cannot be quantified. Increased credibility is reflected in business performance, creating a positive management cycle that ensures soundness.

To win the trust of company stakeholders, ADEKA must present its future direction and pursue ethical management, which is synonymous with its goal of becoming a sound company. Trust is earned in small steps and facilitated by a high sensitivity to information from a group and global perspective, as well as timely actions taken onsite.

In the years ahead, I hope to put my experience to use and fulfill my responsibilities as an external director to bolster sound management and enhance corporate value.

Compliance

•Basic Stance on Compliance

The management policies of the ADEKA Group make it possible to effectively respond to changes in the social and managerial environment. They are intended to realize sound management and harmony with international society by sufficiently protecting the interests of stakeholders. Such management policies and corporate missions are the essence and origin of compliance.

The ADEKA Group's compliance management is intended to fulfill public expectations and demand through the provision of new value that is useful in resolving social issues by providing high-quality products and services created using ADEKA's unique technologies and through actively communicating with stakeholders as well as engaging in social contribution activities.

•System for Promoting Group Compliance

The Compliance Promotion Committee meets four times a year to manage and monitor compliance at ADEKA. A system for instilling the Basic Compliance Policy across the company and swiftly collecting information have been established by appointing Compliance Leaders in each section. Also, representatives and compliance officers of major Group companies meet twice a year for the Group Compliance Conference.

Every 2 years, the company carries out a survey on compliance awareness, targeting all executives and employees of major Group companies, and uses the survey results to improve activities in a united Group effort to rigorously enforce compliance.



Training for Compliance Leaders

•Strengthening Group Compliance

The ADEKA Group seeks to raise awareness of compliance by conducting training for each job position and workplace. At the Global Accounting Staff Meeting in September 2016, 27 local managers from 16 overseas Group companies gathered to heighten their knowledge of the Group's management policies and mid-term management plan, CSR, compliance, and prevention of bribery. The introduction of e-learning has made it possible for

employees to acquire knowledge on laws and compliance in greater detail. A total of 2,487 employees attended courses on topics including information management, trade control, competition law, anti-bribery regulations, and patents.

The company also organized harassment training for managers and workplace training at Group companies to raise awareness of and prevent harassment.



Global Accounting Staff Meeting

•Preventing Bribery

In response to tightened regulations against bribery in and outside of Japan, we formulated the ADEKA Group Anti-Bribery Guidelines in Japanese, English, and Chinese and encouraged greater understanding among Group companies by organizing conferences and distributing DVD tutorials. Employees are required to obtain permission before entertaining or giving gifts and must submit a report afterward. Once a year, ADEKA assesses the risks of corruption in Group companies overseas and formulates measures for improvement through PDCA cycles.

•Operational Status of System for Reporting Compliance Issues

The ADEKA Group has maintained an internal reporting system since 2003. Also, the web-based service, D-Quest Helpline, is now more widely known, resulting in nine reports in fiscal 2016, the highest number since the system was introduced.



Poster promoting compliance and internal reporting system

▶Number of Internal Reports

Fiscal Year	2012	2013	2014	2015	2016
Reports	1	7	3	4	9

Risk Management

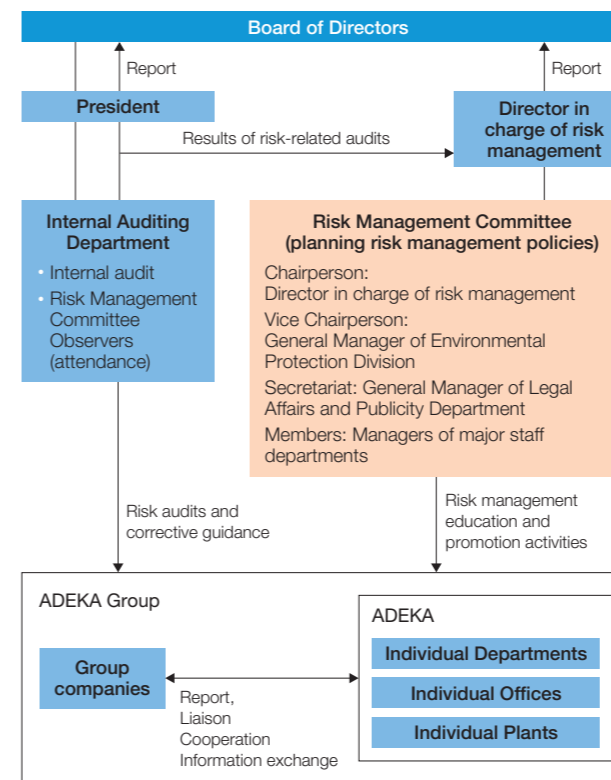
•Basic Stance on Risk Management

As business risks increase in the management environment, the ADEKA Group has sought to prevent risks from materializing and to minimize damage in the event they do materialize. It has done this by outlining a system for managing risks under normal operating conditions in the ADEKA Group Risk Management Manual in a focused effort on prevention and countermeasures.

•Risk Management System

The Risk Management Committee, led by managers of the staff departments in the head office, regularly meet to formulate and manage the Basic Risk Management Policy.

▶Overview of Risk Management



•Risk Identification

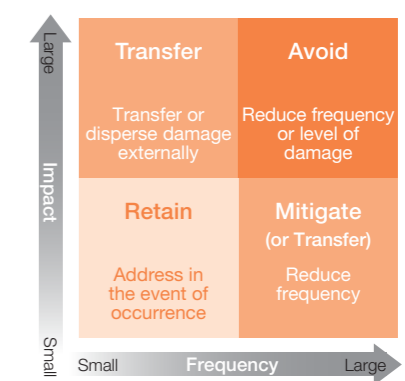
We conduct annual risk assessment surveys of all department and office managers concerning the frequency and impact of risks. Risks are mapped and countermeasures are discussed by subcommittees of the Risk Management Committee. In fiscal 2016, risks related to earthquakes, infectious diseases, information management and security, and BCP were addressed by the respective subcommittees.

〈Theme Selection Method〉

A risk map is created from the results of the survey, and

the area in which the level of damage and impact is above 3 and level of frequency is above 2 is designated as a high-risk zone. Themes that should be addressed by the Risk Management Committee are selected from among the priority issues.

▶Selection of Countermeasures



•Crisis Management

The ADEKA Group Risk Management Manual also sets the framework and workflow that enable each section and Group company to work in concert for quick and effective emergency response.

In addition, ADEKA has published and distributed an Emergency Public Relation Manual with the aim of minimizing the loss of credibility in the event of any scandal, including incidents and accidents happened in the ADEKA Group.

•Business Continuity Management

The BCMS Committee takes the initiative on business continuity management for minimizing any damage to business assets and enabling the continuation or early recovery of business activities in the event of an emergency.

•Strengthening Information Security

ADEKA revised its Internal Information Management Regulations and established the Trade Secret & Confidential Information Protection Manual in 2015. It has been rigorously implementing information management and security measures under the regulations. To enhance employee knowledge and awareness, an external lecturer was invited by the company to conduct a seminar on information security in April 2016, and 544 employees attended.



Information security seminar



Product Safety Initiatives

The ADEKA Group places top priority on customer satisfaction and security as it strives to provide safe, high-quality products and services to bring about a healthy and affluent society.

Message from General Manager

The ADEKA Group provides safe, high-quality products around the world by adhering to its Quality and Safety Policy. In our chemicals business in fiscal 2016, we achieved compliance with the revised Industrial Safety and Health Act in Japan as well as newly enacted international laws and regulations, such as the GHS in Thailand and Australia. We also began partial operation of the new SDS creation system in and outside of Japan. In our food business, we sought to bolster overall management of product information by deploying a system for gathering information on raw materials in fiscal 2015, and we considered introducing a new product information system in fiscal 2016.

Koji Shishido

Operating Officer and General Manager, Environmental Protection Division General Manager, Environmental Safety & Quality Assurance Department



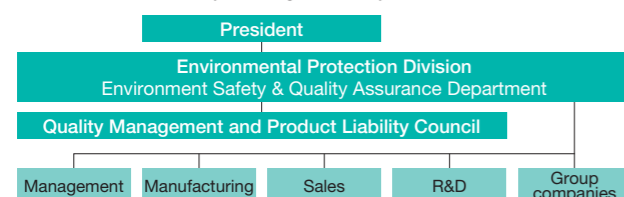
Quality and Safety Policy for Fiscal 2016

- Promoting activities to eliminate complaints and in-process defects through thorough risk management and prevention of recurrence.
- Reinforcing management of raw materials information and chemical substances.
- Raising food security from the standpoint of food defense, preventing leakage of chemical substances, and applying meticulous care in storage and control.

Quality Management System

ADEKA is guided by its Quality and Safety Policy as its sales, manufacturing, R&D, and staff departments each pursue quality and safety initiatives. The company conducts quality and PL inspections*1 to ensure that these initiatives are being effectively implemented. The results are shared at the Quality Management and Product Liability Council as part of the PDCA cycle.

► Overview of Quality Management System



Supply Chain Management

The ADEKA Group strives to reduce risk across the entire supply chain by rigorously implementing proper management at each stage, from procurement of raw materials to product use and disposal.

• Control of Chemical Substances

Global efforts are underway to put in place sustainable production and use of chemical substances toward minimizing the adverse effects of chemicals on human health and the environment by 2020, which is the goal of the Strategic Approach to International Chemical Management (SAICM)*2. As a materials manufacturer that handles chemical substances, the ADEKA Group promptly responds to stringent regulations introduced in the EU

► Targets and Actual Results for Fiscal 2016 and Targets for Fiscal 2017

Item	Targets for FY2016	Actual results for FY2016	Targets for FY2017
Full compliance with PL	<ul style="list-style-type: none"> Issuing and operating of SDS*3 using an automatic SDS creation system that complies with overseas regulations Introduction of a new system that is compliant with enforcements in products information management 	<ul style="list-style-type: none"> Began partial operation of an automatic SDS creation system to issue SDS for different countries Achieved compliance in countries that implemented GHS in FY2016, such as Indonesia, Australia, and Thailand Bolstered information management through the introduction of a new system for gathering information on raw materials 	<ul style="list-style-type: none"> Develop country-specific SDS using the automatic SDS creation system that complies with overseas regulations Operate system capable of reinforcing the management of product information
Management of chemicals	<ul style="list-style-type: none"> Compliance with domestic and international regulations Ensuring reporting on actual quantities South Korea: REACH*4 (June 2016), USA: TSCA*5 (September 2016) 	<ul style="list-style-type: none"> Achieved compliance with Japan's revised Industrial Safety and Health Act (onsite display, expansion of target substances, risk assessment) (June 2016) Completed a report on actual quantity in South Korea (REACH) and USA (TSCA) 	<ul style="list-style-type: none"> Maintain appropriate compliance with domestic and international regulations Survey and address latest trends in South Korea (REACH), USA (TSCA), and Thailand (Chemical Substance Control Law) Achieve compliance in countries introducing GHS, including Canada (June 2017)
Safety and assurance for food products	<ul style="list-style-type: none"> Ensuring continued provision of product information to customers Gathering of information on laws related to food labeling standards and ensuring continued compliance 	<ul style="list-style-type: none"> Continued to provide customers with reliable product information based on product standard documentation and written replies concerning quality management Shared information related to food labeling standards with the accompanying FAQs through an in-house task force and set basic policies 	<ul style="list-style-type: none"> Continue providing reliable product information to customers including product standard documentation Continue gathering all regulatory information related to food labeling standards and maintain reliable responsiveness

*1 An initiative unique to ADEKA to check for thorough deployment of measures regarding quality and safety. / *2 International strategy for achieving the goals adopted at the summit meeting on sustainable development in 2002. / *3 Safety Data Sheets containing information including the name of the chemical substance, its properties, hazards, and necessary precautions when handling. / *4 Globally Harmonized System of Classification and Labeling of Chemicals. / *5 The Act on Registration and Evaluation of Chemicals of South Korea, which came into effect on January 1, 2015. / *6 Toxic Substances Control Act.

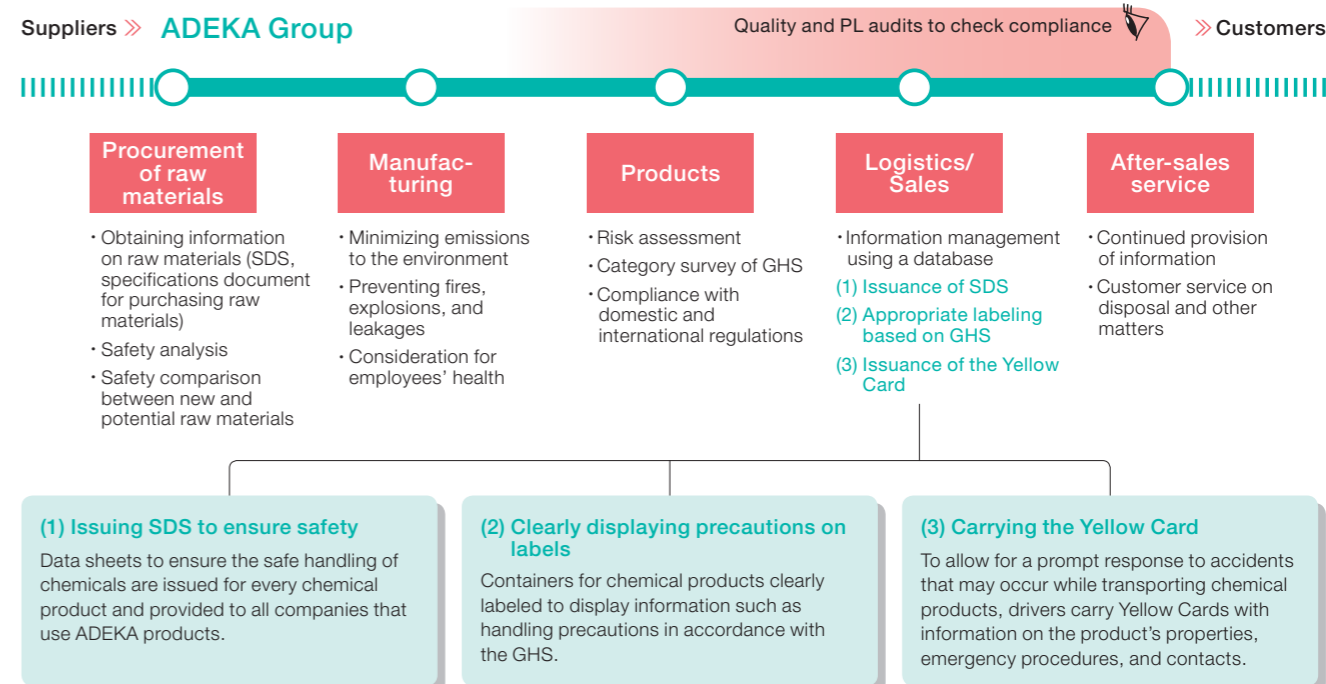
and Asian countries and provides detailed information on the chemical substances used in its products so that customers can confidently use them.

• Food Safety and Hygiene

As a manufacturer providing food materials to its customers and consumers, the ADEKA Group pursues initiatives that ensure product safety and security while also implementing proper hygiene management and complying with related laws and regulations.

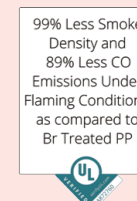
Seventy-five percent of the Group's food production sites have obtained FSSC 22000 certification and are reinforcing quality management from the dual standpoints of food safety and food defense in order to prevent internal and external contamination as well as cross-contamination. In particular, materials containing allergens are placed under stringent control, and a rigorous system of traceability is deployed to manage information from material procurement and manufacturing to sales.

► Supply Chain Diagram



Polymer Additives (Flame Retardant) Receive UL Mark*7 for First Time in the World

The ADEKA STAB FP-2000 series is an intumescent flame retardant widely used in household electrical appliances and construction materials as a product that makes plastics highly flame resistant. It also reduces black smoke density and toxic substances, including carbon monoxide, from plastic under flaming conditions by 99% and 89%, respectively. In recognition of its safety, the retardant became the world's first product in the functional material category to obtain the verified mark from UL LLC., an independent safety organization in the United States, in May 2017.



*7 Certification provided by UL LLC., one of the Nationally Recognized Testing Laboratories in the United States. The organization promotes the use of science to solve safety, security, and sustainability issues.



Environmental Conservation Initiatives

Recognizing that environmental conservation is essential to the existence and activities of any company, the ADEKA Group actively considers environmental impacts and works to reduce them.

Message from General Manager

The ADEKA Group maintains a solid grasp of the environmental impact of its business and is fully compliant with laws and regulations to prevent air, water, and soil pollution. Furthermore, to prevent environmental pollution, we regularly monitor our emissions into the air and water as well as the volume of emissions and transfers with regard to substances designated by the PRTR Law^{*2}.

In our efforts to prevent global warming, we periodically inspect freezers and refrigerators in compliance with Japan's revised law on fluorocarbons and continue to make improvements under the energy saving law.

^{*2} Law for improving the monitoring and control of emissions of designated chemical substances into the environment.



Koji Shishido

Operating Officer and General Manager, Environmental Protection Division
General Manager, Environmental Safety & Quality Assurance Department

Basic Environmental Policy

1. Strive to conserve resources and energy, recycle resources, and reduce the generation of waste, in order to prevent environmental pollution
2. Comply with domestic and foreign laws and regulations related to the environment, and at the same time strive to strengthen voluntary management and achieve further environmental conservation
3. Be aware that corporate activities are dependent upon the blessings produced through biodiversity, and seek to protect biodiversity
4. Take a proactive stance in procuring raw materials that impose a low burden on the environment, and contribute to the realization of a recycling-oriented society
5. Disclose the results of environmental conservation activities to society
6. Communicate with stakeholders and provide support to society and local communities in environmental conservation activities

Environmental Initiatives System

Under the annual policy determined by the Environmental Protection Division, led by the operating officer, each office formulates an execution plan and follows a PDCA cycle to implement environmental management activities that meet local needs.

Chemical Substance Management

Basic Policy

The ADEKA Group will consistently seek to mitigate the risks associated with chemical substances by exercising proper management, reducing environmental impact, and ensuring safe use throughout the product life cycle.

Environmental Initiatives System



Targets and Actual Results for Fiscal 2016 and Targets for Fiscal 2017

Self-evaluation: ● Exceeded target ○ In line with target △ Below target

Item	Targets for FY2016	Actual results for FY2016	Self-evaluation	Targets for FY2017
Promote energy conservation	• Reduce energy intensity by 1% or more year on year	• Energy intensity: 0.1794 kJ/t (2.8% reduction from previous year)	●	• Reduce energy intensity by 1% or more year on year
	• Reduce CO ₂ emissions by 1% or more year on year	• CO ₂ emissions: 0.406 t-CO ₂ /t (3.7% reduction from previous year)	●	• Reduce CO ₂ emissions by 1% or more year on year
Reduce industrial waste	• Maintain complete zero emission ^{*1} rate	• Maintained complete zero emission ^{*1} rate • Landfill disposal volume: 27.3 tonnes (0.064% of industrial waste generated)	○	• Promote and maintain zero emissions through recycling • Promote appropriate disposal of industrial waste (reviewing contracts, inspecting subcontractors, preventing resale of food waste, and other actions)
Promote green purchasing	• Achieve green purchasing rate of 80% or more for 43 designated stationery items	• 79.5% (6,435 items out of 8,091 items purchased)	△	• Achieve green purchasing rate of 80% or more for 43 designated stationery items

^{*1} ADEKA defines "complete elimination" as landfill waste that amounts to less than 0.1% of the total volume of industrial waste output.

Initiatives on Global Warming Prevention

Initiatives for Reducing CO₂ Emissions

ADEKA seeks to reduce its emissions of CO₂, a greenhouse gas that wreaks havoc on a global scale.

In fiscal 2016, ADEKA's production sites engaged in continuous activities for reducing CO₂ emissions, including efficient production plans and elimination of waste. As a result, CO₂ intensity decreased by 3.7% on the year to 0.406 t-CO₂/t.

Energy Saving Activities

The Energy Saving Committee, set up at the Akashi Plant, periodically inspects the production line to identify and repair sections that are prone to leaking steam, thereby preventing wasteful loss of energy. Meetings are held every 3 months to monitor progress. Despite production volume rising by 1.2 times over the past 10 years, the plant has consistently met its target of reducing energy intensity by 1% each year by controlling its energy consumption.

Development of Eco-Friendly Products

The ADEKA Group develops highly eco-efficient products as well as those that protect the environment.

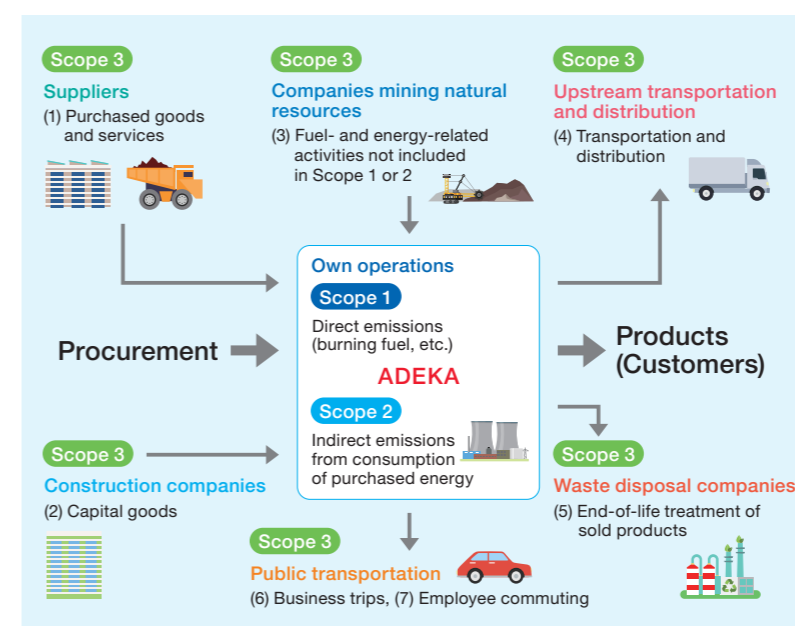
ADEKA SAKURA-LUBE is an automotive lubricant additive used in engine oil and grease that excels in raising fuel efficiency when added to engine oils. Calculations show that use of the product in a million automobiles would reduce fuel consumption by 7,000 kiloliters and CO₂ emissions by 39,000 tonnes per year.

Scope 3 Calculations

In fiscal 2016, ADEKA began calculating greenhouse gas emissions across its entire supply chain in accordance with the Scope 3 international standards for reporting emissions. ADEKA will promote reductions in greenhouse gases by visualizing CO₂ emissions along its supply chain, upstream to downstream.

Japanese Ministry of the Environment website:
https://www.env.go.jp/earth/ondanka/supply_chain/gvc/en/

Flow Chart of ADEKA's Scope 3 Emissions



CO₂ Emissions and Scope 3 Breakdown (scope: ADEKA)

(Unit: thousand tonnes-CO₂)

Scope category	Emissions	
Scope 1	60.9	
Scope 2	85.5	
Scope 3	767.4	
Category 1	Purchased goods and services	702.3
Category 2	Capital goods	26.9
Category 3	Fuel- and energy-related activities not included in Scope 1 or 2	12.0
Category 4	Transportation and distribution	13.2
Category 5	Waste generated by operations	12.2
Category 6	Business trips	0.2
Category 7	Employee commuting	0.6

Total: 913.8 thousand tonnes-CO₂

Reduction of Environmental Impact

Preventing Water Pollution

The ADEKA Group seeks to preserve water resources that are essential for creating a recycling-oriented society. It prevents water pollution by collecting and recycling wastewater from its production process and by complying with relevant laws and regulations to reduce the environmental impact of its wastewater.

Preventing Air Pollution

The ADEKA Group's production and R&D divisions have strived to protect the environment by consistently working to prevent air pollution by reducing their emissions of SOx, NOx, dust, and soot.

Reducing Disposal of Industrial Waste

In light of the illegal resale of products by industrial waste disposal companies that had been reported in 2016, ADEKA reviewed its waste disposal contracts for food products and revised related portions of these agreements. No problems were found in waste disposal contracts for chemical products signed by affiliates and plants in Japan.

Japan's revised food recycling law came into effect in January 2017, and guidelines were published by the Ministry of the Environment. The ADEKA Group will continue to promote the proper disposal and management of food waste.

Promoting Biodiversity



Eagerly observing the native plants Fun observation time with children

In accordance with the ADEKA Group Biodiversity Policy, the ADEKA Group will implement initiatives to promote the preservation of biodiversity and its sustainable use.

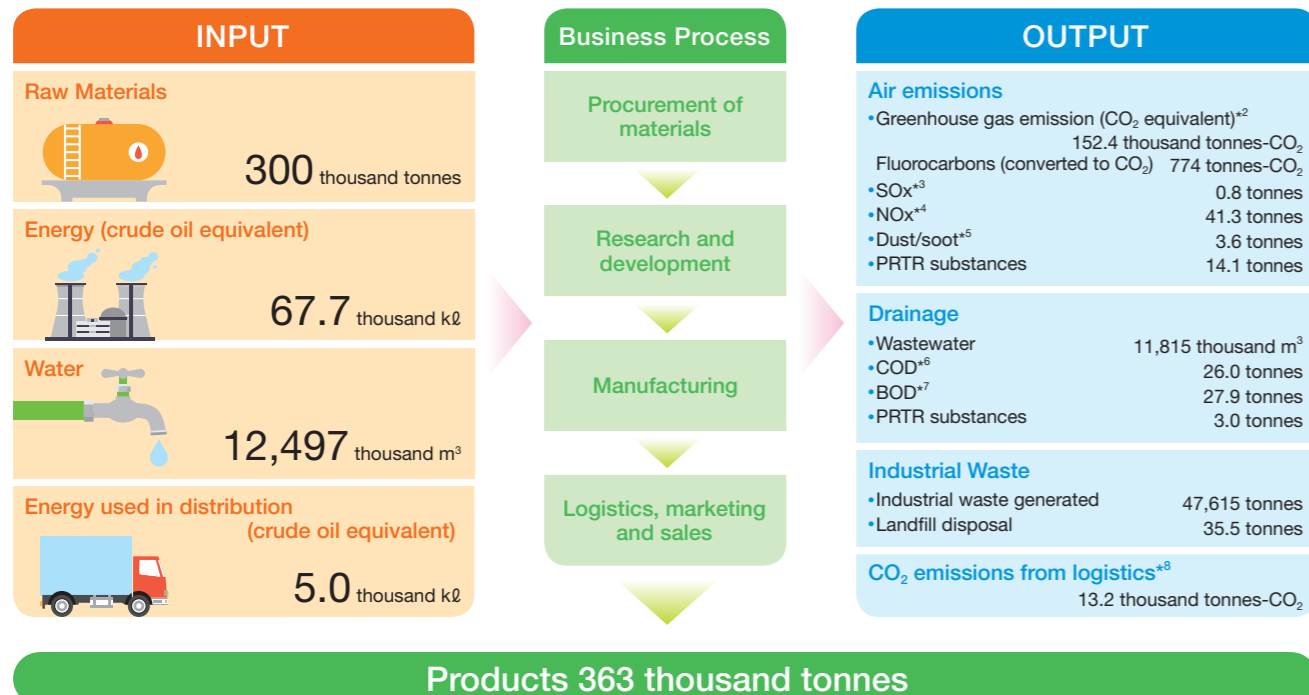
The Fuji Plant has been maintaining a biotope within its grounds since fiscal 2014. A nature observation workshop held in April 2017 was attended by employees and their families. Under the guidance of an environmental adviser from Fuji City, 20 participants conducted fixed-point observations of the surrounding environment and enjoyed being close to nature.

Of the 68 plant species that inhabit the biotope, 48 are native to Japan while 20 are non-native, and the naturalization rate*1 was 29%. Participants were able to find rare species, such as the Asian lizard's tail.

The Group will continue to assess the environment around its production plants.

*1 The percentage of non-native (naturalized) species among plants that grow in a specified area. Surveying and comparing naturalization rates provides a measure of the vegetation naturalness of that area.

Environmental Initiatives System (scope: ADEKA and 11 Group companies in Japan)



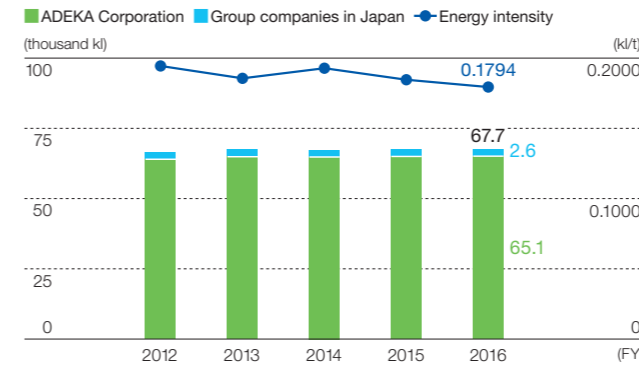
*2 Total emissions arising from energy sources, non-energy sources, and processes / *3 Sulfur oxides generated during the use of fuels that contain sulfur / *4 Nitrogen oxide generated during combustion in plant boilers and incinerators / *5 Fine particles generated during the combustion of fuels and other materials / *6 Amount of oxygen consumed during the oxidation of organic substances / *7 Amount of oxygen required during the mineralization and gasification of contaminants in river water and industrial wastewater by microorganisms / *8 Scope: ADEKA

Environmental Data

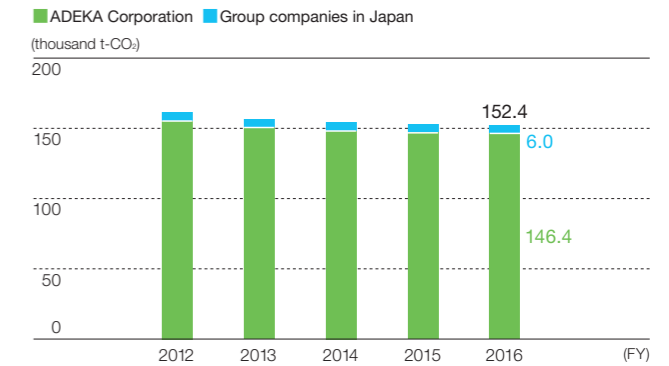
Scope: ADEKA and 11 Group companies in Japan

Note: Detailed ADEKA Group environmental data, including overseas Group companies, is available in the Environmental Data report published in September 2017.

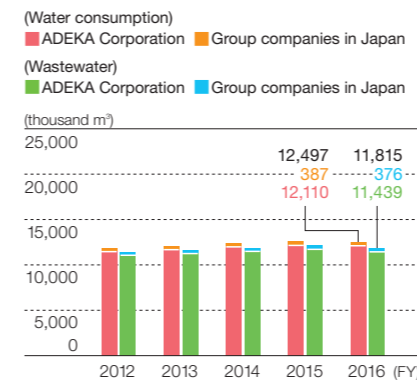
Energy Consumption by Crude Oil Equivalent and Energy Intensity Index from Manufacturing



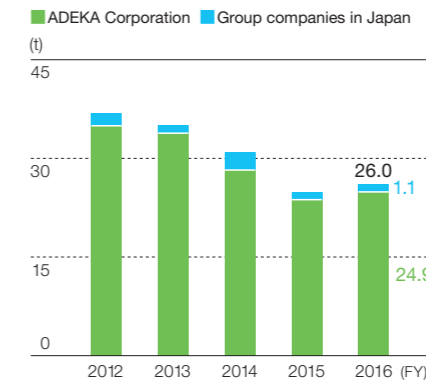
CO₂ Emissions



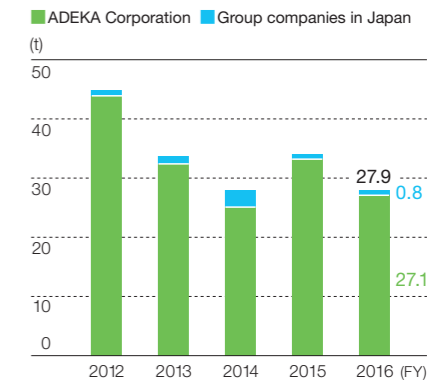
Usage of Water and Wastewater Discharge



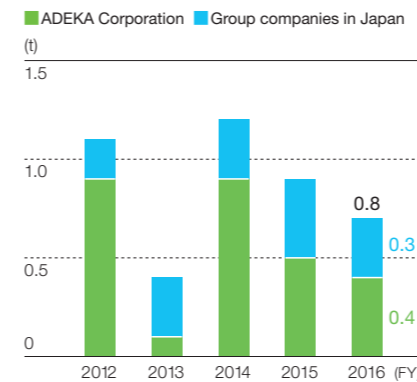
Chemical Oxygen Demand Emissions



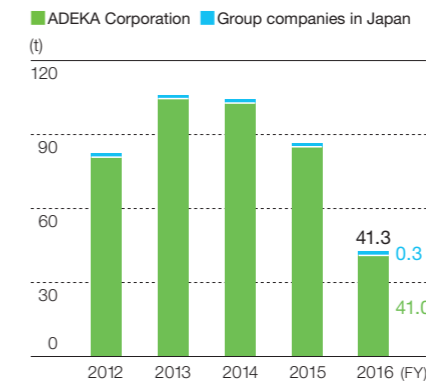
Biological Oxygen Demand Emissions



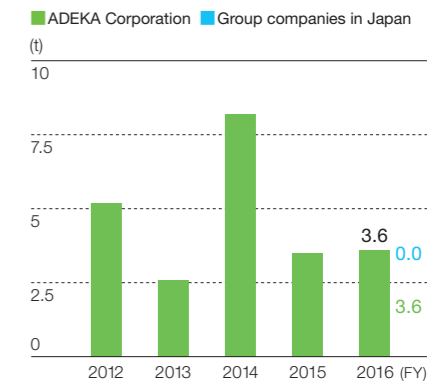
SOx Emissions



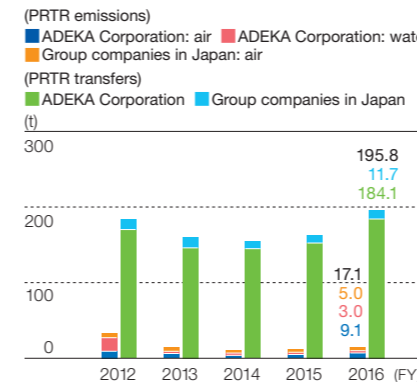
NOx Emissions



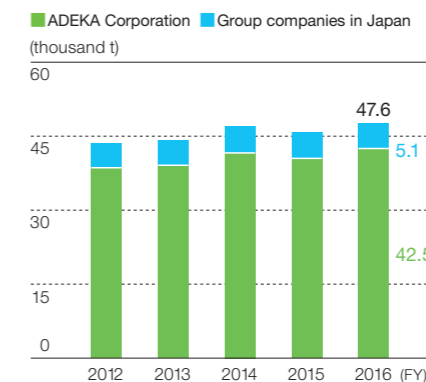
Soot/Dust Emissions



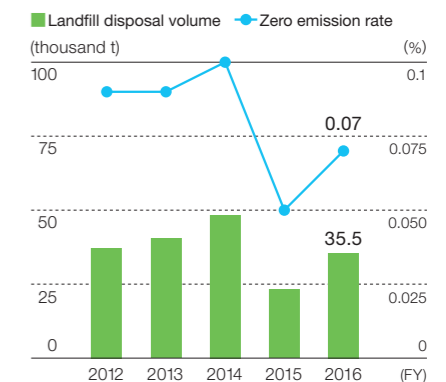
Discharge and Transfer of PRTR Substances



Industrial Waste Generated



Zero Emissions Rate for Landfill Disposal of Industrial Waste





Creating Job Satisfaction with a Positive Work Environment

Our employees are the driving force for advancing the ADEKA Group's business into the global domain. We have a number of initiatives in place to ensure that our employees have a safe and pleasant work environment, where human rights and fair treatment are respected, and which cultivates a vigorous company that values the individuality and intrinsic character of each employee.

Message from General Manager

The ADEKA Group focuses on developing the abilities of each employee through opportunities that allow them to demonstrate their skills. Under this principle, we strive to treat them with fairness based on the level of skills they have attained and how effectively those skills are put into practice, in addition to creating a vibrant and positive work environment.

In fiscal 2016, we took steps to further enhance the work-life balance by reducing working hours and improving the shortened working hour program for childcare and nursing care. We will press ahead with creating a safe, positive work environment where next-generation human resources are fostered and employees can continue to grow, toward becoming a company that provides a sense of fulfillment to its workforce.



Yuji Saito
General Manager,
Human Resources Department

Human Resources Principles

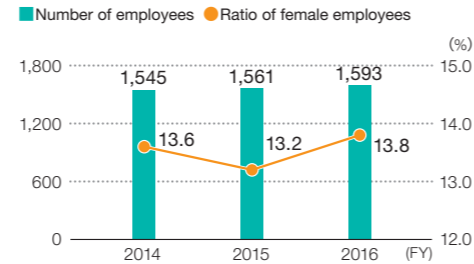
- Respect the human and personal qualities of employees
- Support self-realization by employees
- Develop human capital who have a positive social impact
- Develop employees with initiative

Human Resources Data

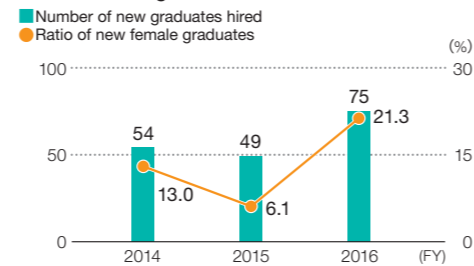
Item	Unit	FY2014	FY2015	FY2016
(1) Number of consolidated employees	Employees	3,099	3,241	3,375
(2) Number of non-consolidated employees	Employees	1,545	1,561	1,593
Male	Employees	1,335	1,355	1,373
Female	Employees	210	206	220
(3) Ratio of female employees	%	13.6	13.2	13.8
(4) Employee average age	Years	38.5	38.9	38.8
Male	Years	38.8	39.1	39.0
Female	Years	36.6	37.7	37.5
(5) Average length of employment	Years	15.5	15.9	15.7
Male	Years	15.7	16.1	15.9
Female	Years	13.8	14.7	14.5
(6) Employee turnover rate	%	2.4	2.8	2.5
Male	%	2.3	2.8	2.6
Female	%	3.2	2.8	2.2
(7) Ratio of female managers	%	2.9	2.7	2.9
(8) Number of new graduates hired	Employees	54	49	75
Male	Employees	47	46	59
Female	Employees	7	3	16

* (1): ADEKA Group, (2)-(8): ADEKA

Number of employees and ratio of female employees



Number of new graduates hired and ratio of female new graduates



Targets and Actual Results for Fiscal 2016 and Targets for Fiscal 2017

Focus	Mid-term target	Ultimate target	Targets for FY2016	Actual results for FY2016	Targets for FY2017
Work-life balance	Support plan for nurturing the next generation (April 2015–March 2018)	Target utilization of childcare leave: more than 2 male employees and more than 80% utilization rate for female employees.	Create an environment that enhances participation of male employees in childcare.	Upgraded the details of the reduced working hour program for childcare (reduced the unit of time by which employees can shorten their working hours from 30 minutes to 15 minutes per day).	Set target for utilization of childcare leave at more than 2 male employees and more than 80% utilization rate for female employees (make use of in-house bulletin board, etc., to raise employee awareness and utilization of the program).
		Continue the initiative to reduce overtime working hours.	Enrich various programs implemented to promote achievement of work-life balance among employees.	Working hours for day shifts were reduced by 5 minutes per day starting in April 2016.	Continue the initiative to reduce overtime hours (as a part of work style reforms, promote flexible work styles and rectify long working hours).
Promoting the active roles of women in the workplace	Plan on promoting the active roles of women in the workplace (April 2016 – March 2021)	Achieve a ratio of 5% female managers by 2021.	Ratio of female managers as of March 31, 2017: 2.9% (0.2 percentage point increase from the previous year) • With the goal of increasing the female employee ratio, senior female employees conducted a seminar on the active roles of women in the workplace for students seeking employment. • Revised pamphlets and leaflets for deepening employees' understanding of childcare and nursing care programs, and reminded staff that these programs are available.	Ratio of female managers as of March 31, 2017: 2.9% (0.2 percentage point increase from the previous year) • Increase business skills and awareness for women's participation. • Encourage participation in external training courses. • Enrich the content of training for those in a position close to becoming a manager. • Continue improving the ratio of female employees. • Continue hosting seminars on the active roles of women in the workplace by senior female employees.	Achieve a ratio of 5% female managers by 2021.

Promoting Diversity

Respecting human rights

The ADEKA Group's Code of Conduct clearly emphasizes respect for fundamental human rights, and all employees are in compliance. Furthermore, throughout the processes of recruitment, hiring, and promotions, we respect the value of diverse human resources, regardless of nationality, age, sex, race, or disability, and we have developed a level playing field where each individual can exert his or her personality and take on an active role. Work regulations, too, were laid down to respect the diversity and individuality of people, and prohibit any form of harassment.

Active roles of women in the workplace

The ADEKA Group is open to recruitment and promotions regardless of gender and supports the active participation of women. We are taking steps to raise female employee business skills through efforts such as personnel rotation for career development. Also, we are creating a pleasant work climate that encourages their active participation.

In our recruitment activities, we hosted seminars to provide female science students with an opportunity to interact with female employees representing various generations. As a result of these approaches, 10 women were among the new graduates who joined the company in April 2017.



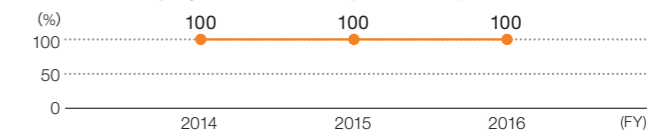
Seminar on promoting the active roles of women (April 2016)

Employment of retirees

ADEKA has established a re-employment system for retirees up to 65 years of age who wish to continue working, with the exception of special circumstances. The re-employed retirees are a valuable presence in passing down traditions to the next generation and play an active

role as experts equipped with the knowledge, experience, and skills that they have built up over their careers. The system supports various working styles, such as full-time work or three-day work weeks.

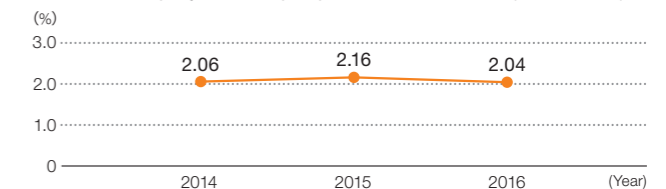
Rate of employment of retiree (for ADEKA)



Employment of people with disabilities

The ADEKA Group continually strives to improve the work environment and expand job categories toward enabling disabled persons to exercise their capabilities and achieve self-realization. We will continue promoting the active employment of people with disabilities.

Rate of employment of people with disabilities (for ADEKA)



Excellent Employee Award received from a city government

An employee with a disability working in the production department of ADEKA FOODS (ASIA) SDN. BHD. in Malaysia was recognized for his earnest work attitude and achievements by receiving an Excellent Employee Award from the city of Pasir Gudang, Malaysia. At the ADEKA Group, employees are able to be actively involved in work by drawing on their unique character.

We will continue to respect diversity and are committed to making an even better work environment.



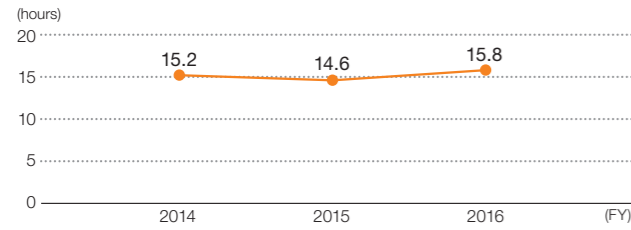
Excellent Employee Award recipient with his family

Promoting Work-Life Balance

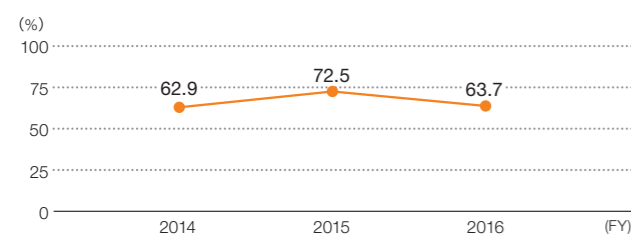
•Optimizing working hours

ADEKA strives to eliminate long working hours through such initiatives as “no overtime days” once a week and by optimizing working hours under the leadership of the Labor-Management Committee. In fiscal 2016, day shift working hours were shortened by 5 minutes per day with the intention of changing work attitudes as well as to safeguard mental and physical health.

▶ Average monthly overtime working hours (ADEKA)



▶ Utilization rate of annual paid leave (union member average at ADEKA)



•Refreshment leave

Employees who have served long and faithfully are entitled to refreshment leave to replenish their mind and body, after 10, 20, and 30 years of service.

The utilization rate for fiscal 2016 was 90%, a 9 percentage point increase compared to fiscal 2015.

•Maintaining a balance between work with childcare or nursing care

ADEKA has introduced programs to support employees in balancing work with childcare or nursing care. The programs provide employees with benefits more favorable than legally required.

In fiscal 2016, 13 employees made use of the childcare leave program, which included shifting a portion of the leave from unpaid to paid, easing conditions for taking the leave, and other steps.

We offer employees a training program during their childcare leave to prepare them for returning to work by providing them with the necessary knowledge and skills. In fiscal 2016, 14 employees participated in the program. In addition, we changed the policy to allow flexibility in the shortened working hour program used by those returning

from childcare leave by reducing the unit of time from 30 to 15 minutes. In fiscal 2016, 28 employees benefited from the revised program. As a result of enhancing the support offered to employees during and after their return from leave, in fiscal 2016 the percentage of women who returned to work and their retention rate were both 100% for the second consecutive year.

▶ Childcare and Nursing Care Support Programs (Underlined sections are areas in which we have exceeded the legal requirements.)

Program	Details
Maternity leave	6 weeks before birth (14 weeks in the case of twins) 8 weeks after birth
Spousal maternity leave	<u>3 days or less</u> in cases where the spouse has given birth
Childcare leave	Until the child reaches 1 year of age, in principle <u>an extension of up to 1 year may be approved under special circumstances</u> (Calculated from the 1st day of childcare leave, special accumulated leave may be approved for up to 5 consecutive days. The period of special accumulated leave will be regarded as paid leave.)
Childcare nursing leave	For employees raising children below <u>grade 4 of elementary school</u> , it is possible to take up to <u>10 days of leave per year, regardless of the number of children</u> , for situations in which they have to take care of an injured or sick child (including vaccinations and health screenings for the child, as well as suspension of classes.) (Childcare nursing leave may be taken in half-day units.)
Nursing care leave of absence	<u>A total of up to 365 days for each person requiring care</u>
Nursing care leave	<u>A total of up to 20 days per year for each person needing care</u>
Shortened working hours	<u>Childcare: Until the end of the child's 4th year in elementary school</u> <u>Nursing care: A total of up to 365 days, combined with nursing care leave of absence</u> (Both may be reduced up to a maximum of 2 hours in 15-minute units.)

VOICE

Work gives me the chance to refresh my mind

Misaki Seino
Quality Assurance Section, Mie Plant

I returned from childcare leave a year after giving birth. Now I work under the shortened working hour program while handling household chores and child rearing. For a while during my childcare leave, I felt depressed because I was so busy with the baby and had so little time to interact with the outside world. After returning to work, however, I've had opportunities to refresh my mind and easily shift from home to work and back, giving me a sense of fulfillment.

I'm aware of the inconvenience caused by my sudden absences or by having to leaving work early. However, many other employees my age are also raising children, and I'm grateful for everyone's understanding. In response to the support extended to me, I'll do my best at both work and child raising.

Cultivating Human Resources

•Approach to cultivating human resources

The ADEKA Group recognizes employees as key company resources. Therefore, we view employees as assets and respect the aspirations of each individual while striving to cultivate human resources that will lead the next generation.

•Cultivating global human resources

We envision ourselves in the year 2025 as a global company that creates value for tomorrow and contributes to affluent lifestyles through innovative technologies. To become the company we envision, we are focusing on cultivating human resources with the ability to play active roles across countries and regions.

Ongoing initiatives	Details
Cultivating global human resources through selected employees	Launched this program in February 2017. With the goal of fostering human resources with the skills required to work effectively overseas, 22 selected employees are studying to acquire special knowledge in such fields as marketing, financial accounting, and foreign languages.
Overseas training program	Young employees are sent overseas (e.g., to the United States, China, and Singapore) for half a year to acquire language skills and the ability to accommodate different cultures as well as to learn business customs. In fiscal 2016, Canada was added to the list of countries.
Language study program	Language lessons with native teachers are offered at each business site. 97 employees attended classes in fiscal 2016. The program can be flexibly scheduled to meet each employee's needs, such as support for attending a language school or for receiving training before being posted overseas.
Accept employees from overseas Group companies	Since fiscal 2016, we have been accepting temporarily transferred employees from overseas Group companies to offer them opportunities to experience living in Japan and to learn about the ADEKA Group's business.
Developing management level employees at international locations	Management development training for employees working at international locations is conducted at production sites in Japan. These courses are designed to deepen the participants' business knowledge and to share the ADEKA Group's management philosophy and values.

VOICE

Gaining an intuitive understanding of the ADEKA Group from a year at the head office

Zhao Hui Yin
ADEKA (CHINA) CO., LTD.

Working at the Finance and Accounting Department, and learning about the operations, management and strategies of the company was a great experience of a lifetime.

I was so impressed by the excellent internal standards and procedures for every job, and the close cooperation among departments and staff members.

Thanks to the highly skilled and dedicated staff who are so kind offering their support and encouragement.

•New employee training program and mentoring system

To develop new employees into key company assets at an early stage and improve the leadership and training skills of mid-level employees, we maintain a mentoring system that assigns a senior employee to advise a new employee by offering guidance and ongoing support.

VOICE

Keeping in mind that everyone is developing new employees together

Eiji Katsuno
Lubricants Department, Functional Chemicals Development Laboratory

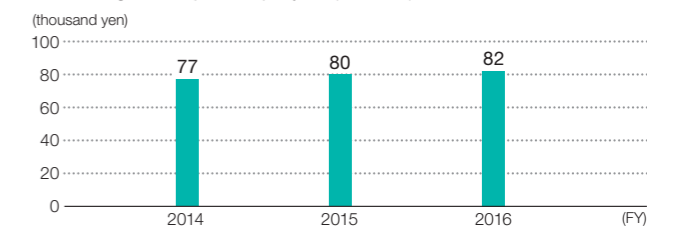


Being involved in fostering a new employee was a stimulating experience for me since it's not something that one can experience very often. I was slightly hesitant to teach about things I had yet to master. But since our human resources department and my supervisors had made it clear that we would develop new employees together, the training environment would support me. Through the activities of the past year, I was able to deepen my awareness and sense of mission to provide follow-up or support by keeping in mind the other person's position or situation. I intend to make the most of my experience and will certainly suggest improvements to workplace issues or the ways we work.

•Employee career development

We conduct training programs to facilitate the development of employee skills in such areas as management, general business competencies, and job specific skills. These are designed to contribute to the acquisition of a wide range of knowledge and to upgrade employee skills. And they are provided in accordance with positions or for selected groups of employees and include such methods as correspondence courses or e-learning. We have also adopted a program through which motivated employees can attend courses for working students at external organizations such as business schools to study marketing theory or to foster critical thinking. All of these initiatives are intended to upgrade employee skills.

▶ Training costs per employee (ADEKA)





Initiatives for Occupational Health and Safety

The ADEKA Group considers safety and security to be the most important issues for companies, and as such strives to establish a safe workplace by enhancing the awareness of all employees through the operation of OHSAS 18001, an occupational health and safety management system, the establishment of health and safety committees at every workplace, and the activities of the Zero Accident Committee.

Occupational Safety

The ADEKA Group strives to eradicate workplace accidents and injuries and maintain safe operations.

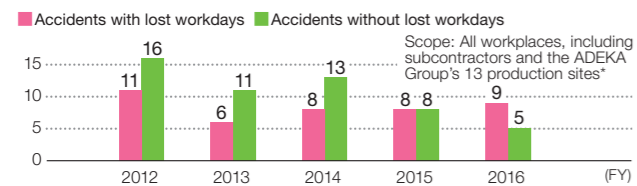
• Safety achievements and issues for fiscal 2016

In fiscal 2016, 9 accidents occurred at the ADEKA Group that resulted in lost workdays and 5 without lost workdays. Although the overall number of accidents dropped from fiscal 2015, accidents resulting from actions by young employees that deviated from the rules increased, creating some concern for the Group in terms of achieving an accident-free workplace.

ADEKA's plants, laboratories, and the Group's production bases within Japan are audited annually by the company's Environmental Protection Division. The audit process reviews the annual activities of these sites and provides guidance to improve any unsafe conditions identified during the site visit.

In addition, to prevent unsafe behavior that deviates

▶ Number of accidents by year



*In fiscal 2017 the scope was changed to ADEKA Group's production base, diverging from the prior year's report.

▶ Targets and Actual Results for Fiscal 2016 and Targets for Fiscal 2017

Item	Targets for FY2016	Actual results for FY2016	Targets for FY2017
Workplace safety and security reinforcement	• Promoting zero-accident workplaces	• Made repeated and persistent calls to be attentive at workplaces • Produced a safety awareness video in Japanese, English, and Chinese, distributed to the Group's production sites and laboratories	• Continue information-sharing toward achieving zero-accident workplaces • Enrich the content of the safety awareness video • Ensure that employees understand basic rules on safety; strengthen onsite inspections
	• Reinforcing safety measures	• Conducted "know-why" training ^{*1} at all plants and laboratories on an ongoing basis and confirmed the effectiveness of these educational activities through an audit	• Repeatedly drill young employees and transferees and continue "know-why" training
	• Improving Group-wide safety level	• In addition to the Group's production bases in Japan, 5 overseas production bases were included to the sites for onsite inspection	• ADEKA Mother Plant and Environment Safety & Quality Assurance Department will cooperate to continue providing safety support and guidance to overseas Group production bases

*1 Understanding the reasons and objectives for and principles of certain procedures by questioning why things are done the way they are, rather than merely applying the details in operating manuals without giving them much thought.

from the rules, we are taking steps to broaden prevention activities throughout each division by performing repeated and persistent reviews as a corrective to the tendency to forget or take shortcuts, calling employee attention to this matter, and making headway with education and guidance, thereby ensuring that measures to prevent the reoccurrence of accidents are put into practice.

• Initiatives to prevent workplace accidents and injuries

Following frequent workplace accidents involving young employees, we have initiated activities to deepen the understanding of fear and danger among the younger employees toward preventing accidents.

At the Chiba Plant, 109 young employees participated in a program which demonstrated serious accidents that can occur during work hours, such as an explosive boil caused by enthalpy of neutralization. The demonstration was videotaped and converted into a safety awareness video in Japanese, English, and Chinese. It included scenes from serious accidents that have occurred in and outside of Japan and indicated what to watch out for. The video was distributed to the ADEKA Group's production sites.

In addition, to better prepare our employees by cultivating a sense of dangerous situations, we set up a facility in the Urawa R&D Laboratory where employees can experience simulations of accidents that can occur during routine work, such as dust and solvent explosions.

• Fostering safety cultures for production sites at overseas Group companies

As part of our initiative to manage the increasing number of overseas production sites, the ADEKA Group is fostering safety cultures by ensuring four areas of safety^{*2} throughout the Group.

Improvement Activity Presentations are held twice a year at all production sites. Their purpose is to build employee awareness through the sharing of accident prevention activities undertaken by staff, streamlining production, and reducing waste, including waste water, and more.

In fiscal 2016, onsite inspections were conducted at the overseas production sites where accidents had occurred. Information on prevention measures and details on the guidance provided during the onsite inspections were shared with the local companies, the main plant in Japan, and the Environment Safety & Quality Assurance Department, and follow-up was also provided.



Onsite inspection at an overseas Group production site

*2 ADEKA Group's exclusively designed initiative for conducting PDCA cycles in four areas of safety: occupational, quality, equipment, and environmental, the items deemed important for plant management and require top priority.

VOICE

Safety Awareness Video Offers Another Opportunity to Think about Safety

Ludovic Fleury
Team Manager in Production
ADEKA PALMAROLE SAS



This video demonstrates how potentially dangerous situations may happen in daily working operations, even if specific situations cannot occur in our plant. We are more concerned about static electricity associated with filling big bags. Friction between granules may generate dust and static electricity, potentially creating a momentary explosive atmosphere. It is important to be involved in security matters both for ourselves, our colleagues, the equipment and the plant and always comply with safety rules. In our plant signalization exists on production lines and in hazardous zones. A map displays potential risk areas. In addition, management information and controls are maintained every day.

Employee Health Management

• Mental health care initiatives

ADEKA conducted a stress check test in May 2016 under the revised Industrial Safety and Health Law, and each workplace implemented improvement activities based on the test results. Also, mental health training was conducted for managers so that they can better support their staff by enhancing understanding of the supervisor's role and to prevent mental health disorders. A total of 387 managers in the Group took part in the training.

• Reinforcing the health and safety of overseas employees

The ADEKA Group is reinforcing its health and safety measures to adapt to the rising number of employees working overseas as well as those traveling abroad on business. In fiscal 2016, training for overseas safety and medical care was conducted to safeguard traveling employees, and 380 employees from throughout the Group attended, including those participating through video conference.

Employees working overseas use the medical examination program as well as telephone interviews with an industrial doctor or face-to-face interviews with the doctor during temporary returns. A 24-hour medical assistance service provides consultation with doctors and other support for any emergency that may arise during an employee's overseas stay. In addition, we have been taking steps since fiscal 2016 to provide external training for medical and mental health care to all employees scheduled to work overseas as well as their families. We will continue our health and safety training activities to improve employee awareness of health management.



Overseas crisis management seminar

• Preventing impaired health from chemical substance

New findings have been recently announced on the hazardous properties of chemical substances, such as related to the rising occurrence of bladder cancer. Information on such hazardous properties and revisions to the Industrial Safety and Health Law are immediately distributed to plants and laboratories as soon as they are available. This is followed by actions, such as confirming the use of such substances and their control status, in order to prevent employee impairment resulting from chemical substances.



Communication with Stakeholders

The ADEKA Group actively communicates with its stakeholders to understand their needs and expectations, and pursues business activities in an effort to become a company that is indispensable to society.

Customers

As a materials manufacturer, the ADEKA Group serves a broad range of industries, including automotive, IT and electronic equipment, and social infrastructure. We identify and anticipate current and future problems while working with customers to develop solutions.

Technical Seminars for Customers

The ADEKA Group organizes technical seminars and lectures for customers to deepen their knowledge of materials and technologies, including other companies' products.

In February 2017, ADEKA AL GHURAIR ADDITIVES LLC (UAE) held a technical seminar on polymer additives to present the specific formulation technologies of our products and their application to customer manufacturing processes.

We will continue to hold these exchanges since they also provide us with excellent opportunities for understanding the problems customers are facing in their daily operations.

VOICE

Reflecting on the Technical Seminar

Dr. Thorsten Loehl
Vice President, Innovation
Borouge Pte. Ltd.

Throughout the technical seminar, I was impressed by the highly advanced clean plant and reminded of the ADEKA Group's technological strengths. The experience left me even more convinced that partnering with ADEKA will enhance our technological competence.



Participants of the technical seminar on polymer additives

Trade Show Exhibitions

The ADEKA Group participates in exhibits and conferences as a means of promoting its products, technologies, and solutions. In the areas of chemicals and foods, customer needs for products and technologies are growing in diversity and sophistication. And so these exhibitions provide us with invaluable opportunities to introduce our products in response to customer needs. In fiscal 2016, we participated in 26 exhibitions for chemicals and foods.



Exhibiting at a bread trade show in China

Customer Recognition

The ADEKA Group strives to provide quality products that contribute to the success of our customers and other stakeholders with a spirit of challenge shared throughout the Group. In recognition of the results of these efforts, and for providing a stable supply of quality products, ADEKA KOREA CORP. and the ADEKA Group received the Best Partner Award from Samsung Electronics Co. Ltd. in fiscal 2016. Moreover, we were encouraged by the expectations and recognition of many other customers in and outside of Japan.



Our Business Partners

The ADEKA Group builds and maintains just and fair relationships with its business partners and pursues co-existence and co-prosperity across the entire supply chain as partners united by common goals.

Forging Stronger Partnerships

The ADEKA Group will evolve in step with distributors who deliver products to our customers. Placing customers above all else, we promote initiatives that transcend corporate boundaries, such as holding regular meetings for special agents, in which we explain our business policies and plans. We also organize intensive seminars for new employees in the chemicals and food businesses, both at ADEKA and at our distributors, where participants learn about negotiation skills and acquire knowledge about products and technologies.



Seminar for new employees of ADEKA and its distributors (ADEKA University for the chemicals business and Risu University for the food business)

Secure and Safe Procurement of Raw Materials

• Basic Approach

In 2002, ADEKA established Procurement Management Standards to secure procurement activities based on trust and cooperation with customers. Ensuring a stable supply of products requires maintaining a reasonable level of inventory and efforts to secure an inventory of raw materials used in our products by suppliers, as well as safeguarding multiple procurement channels.

• Eliminating conflict minerals

As a company that seeks co-existence and co-prosperity with society, ADEKA does not purchase raw materials containing conflict minerals. To ensure this, we ask suppliers to respond to the Environmentally Hazardous Substance Survey when concluding a quality warranty agreement.

• Ensuring the compliance of suppliers

ADEKA ensures that suppliers understand its procurement policy by distributing its Risk Management Standards among food material suppliers and asking new suppliers to respond to the Compliance Survey.

We rigorously implement traceability management by conducting audits as necessary to inspect production sites and product quality at our business partners responsible for manufacturing raw materials and contract production in our chemicals and food businesses.

Safety Conference for Logistics Companies

To ensure that the ADEKA Group logistics system is capable of securely and safely delivering products to customers, we hold an annual safety conference for each section (chemicals, food, East Japan, West Japan, and lorry transport), which brings together ADEKA Logistics Corp. and all logistics partners.

We are boosting the level of all companies that share the responsibility of delivering ADEKA products by providing knowledge about the physical properties and optimal temperature conditions of products inside the containers they do not usually see. We also organize Group discussions on different types of logistics risks.



Group discussion

Initiatives for Developing a Global Logistics System

ADEKA is promoting halal certification at manufacturing sites that produce cosmetics raw materials for global markets and food products for Southeast Asia. ADEKA FOODS (ASIA) SDN. BHD. obtained halal certification in 2014 and has since become the leader in the Group's supply chain by training logistics suppliers in these standards to quickly establish a halal-compliant logistics system in Malaysia.



Halal-compliant truck

Shareholders and Investors

The ADEKA Group seeks to maximize corporate value through its business activities to meet the expectations of shareholders and investors.

Proper Disclosure of Information

ADEKA strives to disclose accurate corporate information in a fair and timely manner to all stakeholders based on its disclosure policy. Moreover, the Group actively discloses important information pertaining to company management, including business plans, to enhance understanding of ADEKA.

The company observes a silent period preceding the announcement of its financial results to refrain from commenting on specific topics and from disclosing any unconfirmed information prior to the announcement. However, the company will disclose information should it determine that the content of its financial results would significantly impact shareholders and investors.



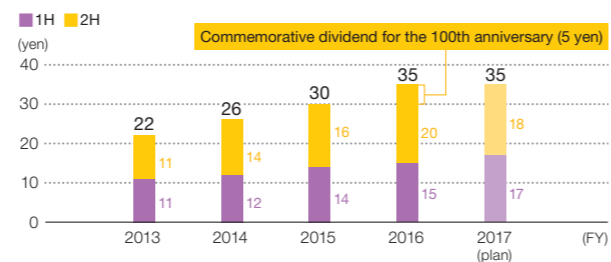
155th Annual General Meeting of Shareholders

Dividend Policy

ADEKA redistributes its profits to shareholders based on an overall consideration of the management environment, business performance, and financial condition.

With the understanding of its shareholders, ADEKA applies its internal reserves by placing a priority on strengthening its management base and investing in growth businesses from a mid- to long-term perspective.

Annual Cash dividends



IR Activities

The company actively engages in IR activities, including briefing sessions on financial results and the issuing of a tool for explaining the results for the benefit of institutional investors and analysts. In fiscal 2016, briefings on financial results took place twice, and 145 IR meetings were also held.

Competitors

By enhancing mutual value through fair competition grounded in rules and ethics, the ADEKA Group aspires to achieve sustainable development for the entire industry and society at large.

Participation in the Industry Organization that Promotes Understanding of PVC in Southeast Asia

In fiscal 2016, ADEKA FINE CHEMICAL (THAILAND) CO., LTD. became a member of the ASEAN Vinyl Council (AVC), which comprises ten PVC-related manufacturers in Southeast Asia. This group's main purpose is to promote environmental consideration of the PVC industry by shifting

the emphasis to eco-friendly products, instead of solely focusing on cost.

The ADEKA Group has been an industry leader in eliminating the use of heavy metals in the area of PVC stabilizers, and it consistently communicates the elimination of hazardous substances such as heavy metals as a common goal for the industry.



Local Community

The ADEKA Group believes that companies can only exist through the understanding and cooperation of the local community. It works alongside local communities as a good corporate citizen, seeking co-existence and co-prosperity by participating in policy initiatives and events.

Activities for Local Communities



ADEKA KOREA CORP. (South Korea) participates in a river purification project



ADEKA FINE CHEMICAL TAIWAN CORP. (Taiwan) receives the Excellent Bonded Factory Award



CSR activity presentation for the local community by the Mie Plant (Japan)



Kashima Plant (Japan) exhibiting at a local industry festival



Rendering of completed R&D and production facility for fisheries and seeding of Fukushima Prefecture

Security and Disaster Prevention

Security and disaster prevention are the most important responsibilities of ADEKA Group production sites that handle hazardous and toxic materials. To gain the trust of the local community, we not only comply with relevant laws and regulations but also rigorously manage processes, facility maintenance, and voluntary safety.



Akashi Plant (Japan) representatives drill to prevent abnormal discharge of wastewater



ADEKA FOODS (CHANGSHU) CO., LTD. (China) conducts a firefighting gear drill



ADEKA KOREA CORP. (South Korea) participates in a joint government-private sector drill for preventing leakage of toxic substances

Initiatives for Earthquake Reconstruction

The Soma Plant was seriously damaged by the Great East Japan Earthquake on March 11, 2011, resuming delivery of products to customers three months later. ADEKA has been supporting recovery and reconstruction efforts by extending donations and supplies and continues to provide land for emergency housing free of charge while leasing idle plant land for reconstruction work.

In September 2016, a groundbreaking ceremony for Fukushima Prefecture's R&D and production facility for fisheries and seeding took place, and construction is underway for its scheduled opening in April 2018.

Supporting Children who Carry the Future on Their Shoulders

The ADEKA Group engages in a broad range of activities in the hope of contributing to the healthy development of children as they head into the future. Also, in fiscal 2016 we actively supported students, who share in our quest for science, through a 2.9 million yen donation.



Holding the ADEKA Cup, a judo and kendo tournament for elementary and junior high school students



Mie Plant (Japan) accepts elementary and junior high school students for a work experience program



AMFINE CHEMICAL CORP. (United States) participates in a church program

Third Party Opinion

Elevating the Group's Level of CSR

Takeshi Mizuguchi

Professor, Faculty of Economics, Takasaki City University of Economics



Obtained a PhD from the School of Business Administration (Meiji University). Specializes in responsible investment and non-financial information disclosure. He arrived at his current position in 2008 after becoming a lecturer in the Faculty of Economics at Takasaki City University of Economics in 1997, then an Associate Professor of the same faculty. He worked in successive positions as Director of the Society for Environmental Economics and Policy Studies, Chair of the Green Bonds Working Group (Ministry of Environment), and member of the EGS Working Group (Ministry of Environment). He has published books including Responsible Investment – Changing the Future through the Flow of Capital (Iwanami Shoten, Publishers) and Stream of Environmental Finance and Responsible Investment (Chuokeizai-sha, Inc.).

Expecting the ADEKA Group to maintain its R&D to meet social needs

I would like to express my respect for a company that has expanded its business over the past 100 years by providing new materials and products that meet the needs of the times. I believe that serving society through its core business represents the very foundation of CSR. Also, I was reassured by seeing that the Commitment of Our Top Management section at the beginning of this report cited the Sustainable Development Goals and confirmed that a company is a public vessel of society and must fulfill its responsibility for addressing social issues as a member of the international community. And in confirming that the Group will fulfill its responsibility, the report also made clear that the key is to provide advanced materials and solutions. The report includes the achievements of several R&D projects, and I expect ADEKA to continue generating results far into the future. It would be even better to visualize the level of contribution of each accomplishment in bringing about a sustainable society.

Identifying and Facing the Challenges of Global Trends in CSR

The ADEKA Group must be completely prepared to deal with environmental and social risks. For example, palm oil, a major raw material for the company's food business, has been associated with deforestation due to the way trees are cleared in peatland to develop plantations, as well as with child labor. IOI Corporation, an ADEKA partner through the Malaysian subsidiary ADEKA FOODS (ASIA), had its Roundtable on Sustainable Palm Oil (RSPO) certification temporarily suspended last year. While IOI subsequently recovered its certification, ADEKA should clarify its position on how it recognizes these

issues and how it will respond to similar situations in the future.

In addition, following the Paris Agreement, the world is now moving toward a decarbonized society. When considering the next 100 years, ADEKA should bear in mind the global goal of reducing human-made emissions of carbon dioxide to zero in the second half of this century. Leading companies around the world are seeking to contribute to this goal by participating in initiatives such as Science Based Target (SBT), for setting targets that are consistent with the goal of reducing temperatures by 2°C, or RE100, for pledging to adopt renewable energy sources for 100% of the electricity used by a company. I think that taking on these challenges in step with such leading companies is the true sign of a global company.

Creating Workplaces that Empower Women

Human resource data disclosed by the ADEKA Group shows there is little difference in the average age and years of service between men and women. I believe that this means marriage and childbirth are not major obstacles to continuing work and imply that the Group provides a comfortable workplace for female employees. I commend this, as it reflects the company's workplace environment efforts. However, despite a small difference in the years of service, I did notice a gap between the ratio of female employees and the ratio of female managers. One must avoid assuming that becoming a manager is the most important thing for everyone, but the company should nevertheless consider whether there are any reasonable explanations behind this gap.

As described above, the ADEKA Group faces various environmental and social challenges. I have high hopes for the company in establishing its corporate system and consciously promoting even more advanced CSR initiatives.

building a low-carbon society, with the belief that there are many other ways we can contribute to attaining the goals of the Paris Agreement. While aiming to support these initiatives and respond to their framework, we will begin by visualizing our CSR efforts and constructing a system for maintaining a PDCA cycle.

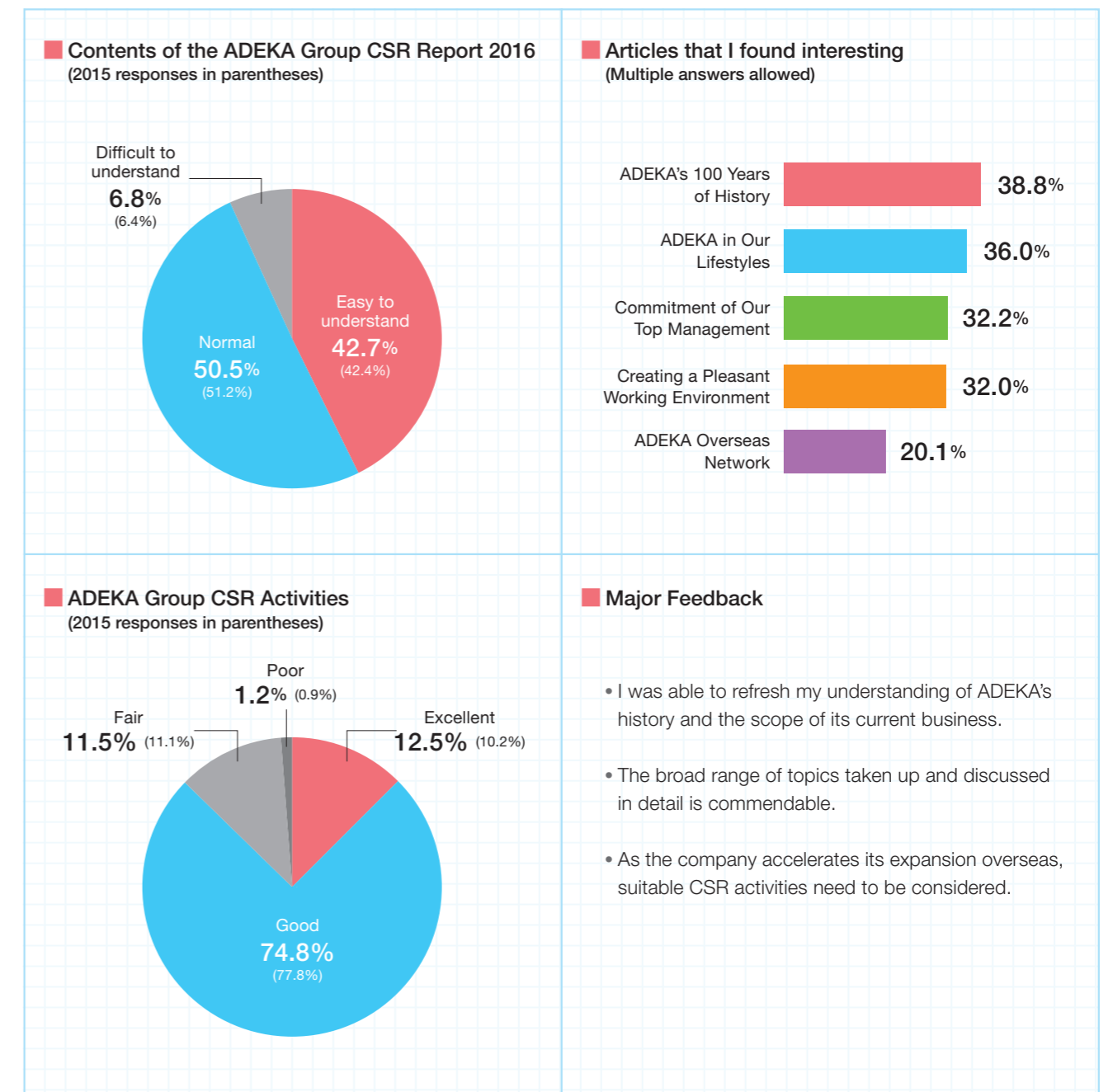
The ADEKA Group will strive to meet the expectations of its stakeholders and advance in step with global efforts for building a sustainable society, toward its goal of becoming a company that enriches people's lives.

Results of the ADEKA Group CSR Report 2016 Survey

ADEKA has conducted a questionnaire in order to obtain opinions from within and outside the company so as to further improve on our activities and reports. Thank you for your valuable comments and feedback. The following is a report of the survey results.

Effective responses: 503 (2015 survey: 450) Includes responses from affiliated members of the ADEKA Group.

Survey methods: questionnaire at the end of the report, external website questionnaire



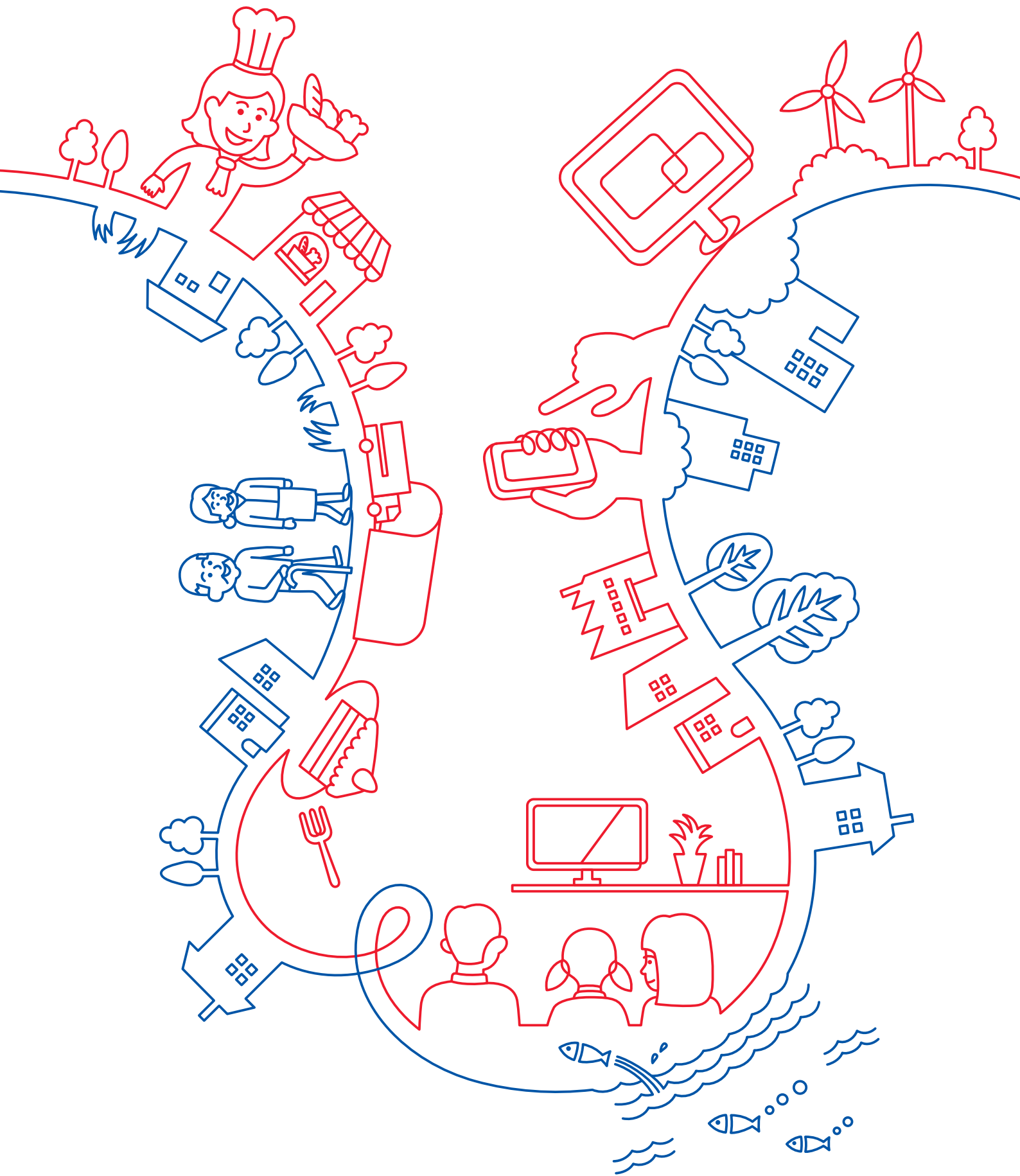
Previous ADEKA Group CSR reports are available at: <http://www.adeka.co.jp/csr/en/report.html>

Response to Third Party Opinion

Koji Tajima Director and Operating Officer

I would like to express my gratitude for your valuable opinions on the ADEKA Group's CSR activities. We are honored by the expectations you have expressed about the Group's R&D and the way it helps resolve social issues in various areas.

As for our response to global trends in CSR, the Group has begun preparing to obtain certification including joining the RSPO with regard to palm oil, which is associated with environmental destruction and human rights violations. And we have begun Scope 3 calculations as an initiative toward



ADEKA CORPORATION

Head Office: 7-2-35 Higashi-ogu, Arakawa-ku, Tokyo
 HP Address <http://www.adeka.co.jp/en/index.html>
 contact information
 Legal Affairs & Publicity Department
 TEL: +81-3-4455-2803 FAX: +81-3-3809-8210
 e-mail: somu@adeka.co.jp

