

CSR REPORT 2019

Corporate Social Responsibility Report 2019



ADEKA

CONTENTS

3 Greeting	23 CSR Priority Issues
5 Feature Value Creation by the ADEKA Group Contributing to Society through Technologies and Products That Bring Tomorrow Closer	25 Working with Stakeholders
11 ADEKA in Our Lifestyles	25 With the Environment
13 ADEKA Group Network	29 With Customers
15 ADEKA Group Co-Creating Value Realizing the ADEKA Vision 2025	31 With Business Partners
17 Value Share with Stakeholders	33 With Employees
19 Message from the President	38 With Shareholders and Investors
22 BEYOND 300 Mid-Term Management Plan (FY2018-2020)	39 With Local Society
	41 Governance
	46 Third Party Opinion/Response to Third Party Opinion

Management Policy

To be a company that is progressive and dynamic with a keen attitude towards the new changing tide
Creating a better future for the people of the world

Corporate Profile

Name: ADEKA CORPORATION	Capital Stock: 22.944 billion yen
Established: January 27, 1917	Shares Issued: 103,651,442
President and Chief Operating Officer: Hidetaka Shirozume	Number of Employees: 5,154 (consolidated)
Head Office: 7-2-35 Higashi-ogu, Arakawa-ku, Tokyo	Business: Chemicals, Foods, life sciences and Other Business

The History of ADEKA

1900~

- 1917 Asahi Denka Co., Ltd. established
- 1919 Hydrogenated oil manufacturing started
- 1920 Soap manufacturing started
- 1929 Manufacturing of RISU BRAND margarine started (food business started)
- 1949 ADEKA listed on the First Section of Tokyo Stock Exchange



Store sign

1950~

- 1954 Plasticizer manufacturing started
- 1959 Fuji Plant operations started
- 1965 Mie Plant operations started
- 1966 Akashi Plant operations started
- 1967 Oxirane Chemical Corp. established
- 1970 Kashima Plant operations started
- 1975 Chiba Plant operations started
- 1988 ADEKA (Singapore) Pte. Ltd. established in Singapore
- 1991 ADEKA Korea Corp. established in South Korea
- 1994 Amfine Chemical Corp. established in U.S.
- 1995 Soma Plant operations started

2000~

- 2000 ADEKA Polymer Additives Europe SAS established in France
- 2001~04 Six subsidiaries established in China
- 2003 ADEKA (Asia) Pte. Ltd. established in Singapore
- 2004 ADEKA USA Corp. established in U.S.
ADEKA Fine Chemical (Thailand) Co., Ltd. established in Thailand
ADEKA Fine Chemical Taiwan Corp. established in Taiwan
- 2006 Asahi Denka Co., Ltd. name changed to ADEKA Corporation
- 2007 ADEKA India Pvt. Ltd. established in India
- 2011 ADEKA Al Ghurair Additives LLC established in UAE
- 2012 AM Stabilizers Corp. established in U.S.
ADEKA Foods (Asia) Sdn. Bhd. established in Malaysia
ADEKA Brasil Ltda. established in Brazil
- 2016 Representative office established in Ho Chi Minh City, Vietnam
- 2017 ADEKA Corporation centennial
ADEKA Fine Chemical (Zhejiang) Co., Ltd. established in China
- 2018 Nihon Nohyaku Co., Ltd. acquired and made into a Group company

Editorial Policy

The ADEKA Group publishes this annual CSR Report to communicate its efforts and future direction to realize a sustainable society, for a broad spectrum of stakeholders. The *CSR Report 2019* highlights the ADEKA Group's priority initiatives in fiscal 2018. You can learn more about these initiatives by visiting the ADEKA Group CSR website. We welcome your honest feedback using the questionnaire included with this report. Your input will help us to create a better and more comprehensible report so that we can reach more stakeholders.

Scope of 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 2018 (April 1, 2018 to March 31, 2019)
Some parts of this report refer to recent activities taking place in fiscal 2019.

Reference Guidelines

Environmental Reporting Guidelines (Fiscal Year 2018 Version) of the Japan Ministry of the Environment
Japanese Standards Association ISO 26000:2010 Guidance on social responsibility
GRI Sustainability Reporting Standard 2016
Guidance for Collaborative Value Creation, Ministry of Economy, Trade and Industry

Published Date

October 2019 (next publication date: October 2020)

Whole Picture of Disclosure of CSR-Related Information

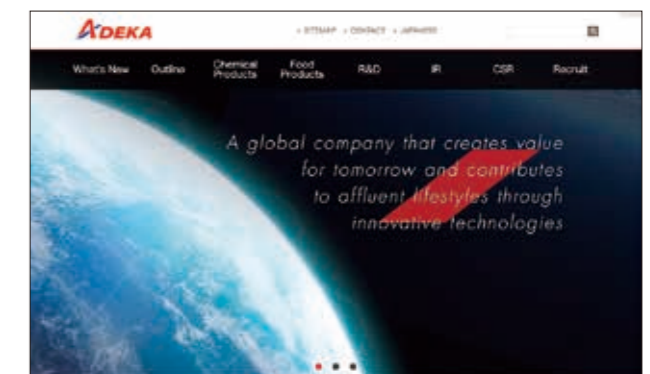
- CSR Report (Booklet, PDF)
Whole Picture of Disclosure of CSR-Related Information
- ESG Data Book (PDF)
This comprehensively reports chiefly on the ADEKA Group's annual CSR activities.
- Website
Visit the website to access previous CSR Reports, site reports for manufacturing facilities, the ADEKA Group Code of Conduct, and more

ADEKA CSR site

<https://www.adeka.co.jp/csr/en/index.html>

Investor Relations

<https://www.adeka.co.jp/ir/en/index.html>



Main Content

- Site reports (in Japanese only)
- CSR-related policy, etc., and supplementary information
- GRI Guideline Balance Sheet
- Back number of CSR Reports
- Chronological Table of CSR activities



Akio Kohri

Chairman and Chief Executive Officer

Pursuing a Sustainable Society

Amid rising globalization, countries are becoming more interdependent due to their increasing mutual influence. There are more than a few issues that need to be addressed through the cooperation of the international community, including poverty, oppression of human rights, and environmental issues.

The United Nations, in the 2030 Agenda for Sustainable Development that was adopted in September 2015, declared 17 sustainable development goals (SDGs) and 169 targets, pledging that no one will be left behind in tackling change. The agenda calls upon businesses to apply their resources to realize an international community that balances the three aspects of sustainable development: economic, social, and environmental.

Since its establishment in 1917, ADEKA has sought to be a good corporate citizen through healthy and transparent management practices and consideration for the environment and society. At the same time, we have made it our mission to ensure a continued supply of safe and secure products that offer advanced performance and high quality in order to realize new value for society.

In September 2018, ADEKA acquired Nihon Nohyaku Co., Ltd., which was originally the agricultural chemical department of ADEKA before it was spun off 91 years ago. The reintegration of Nihon Nohyaku into the ADEKA Group further expands our business platform. While complementing each other's business domains, ADEKA will realize synergies with Nihon Nohyaku, a company that develops agrochemicals and other chemicals that help to secure a safe and steady food supply for the world.

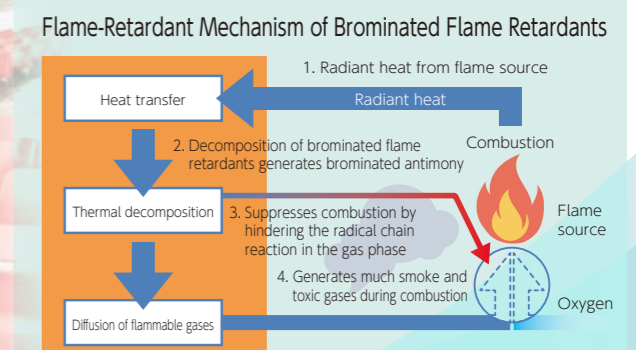
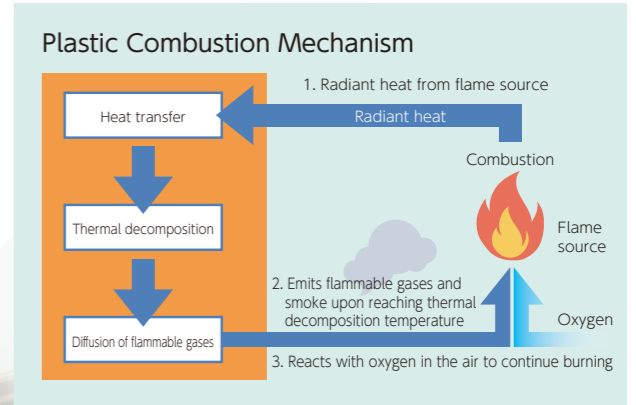
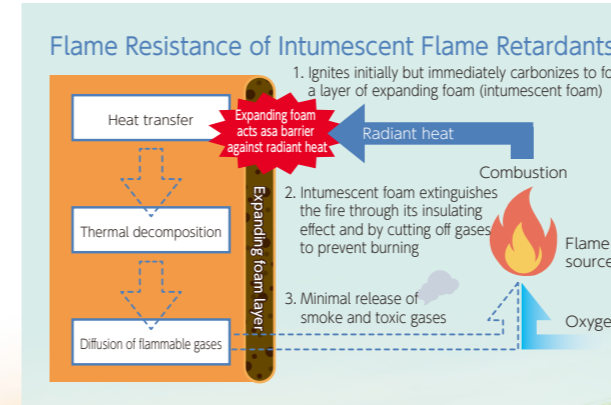
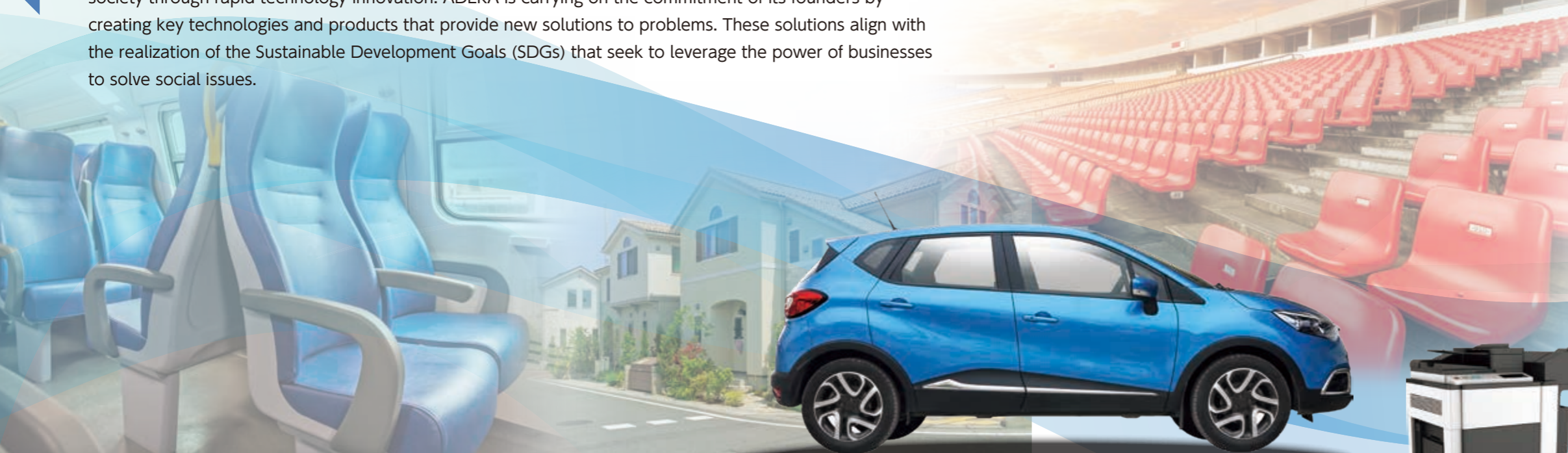
We will pool our talented human resources and advanced technology in the fields of chemicals, foods, and now life sciences, to help address social issues including those relating to the global environment, resources, and food safety, as we strive to realize a sustainable society.

In fiscal 2018, over 46% of the ADEKA Group's net sales were generated in markets outside of Japan, and more than 40% of its workforce was based outside of Japan. As our international business has grown, we have gained a better understanding and awareness of our responsibilities and mission as a global corporation. Guided by a management policy of creating a better future for the people of the world, and given our international growth, we will listen intently to our diverse stakeholders and recognize both the positive and negative impact that the Group has in striving to make an even greater contribution to society.

I hope that you, our stakeholders, will continue to lend us your support and encouragement as we move forward.

Contributing to Society through Technologies and Products That Bring Tomorrow Closer

ADEKA was established in 1917 to manufacture caustic soda in Japan, with prices rising as a result of World War I. Shortly thereafter, ADEKA began manufacturing hydrogenated oils to effectively use the hydrogen byproduct, later expanding into soap and margarine production. It was from these roots that ADEKA grew to its unique position as a company based on the twin pillars of chemicals and foods. ADEKA's founding prospectus reads, "In the interest of Japan and its citizens, caustic soda production in Japan should be achieved as soon as possible." These words embody ADEKA's commitment to benefitting society through rapid technology innovation. ADEKA is carrying on the commitment of its founders by creating key technologies and products that provide new solutions to problems. These solutions align with the realization of the Sustainable Development Goals (SDGs) that seek to leverage the power of businesses to solve social issues.



ISO 5659-2 Signal Chamber Test Results

Measurement of smoke density and toxic gas release when applying heat to test object

Additive (Percentage of Formula)	Smoke Density (Ds max.)	Toxic Gases	
		Brominated Hydrogen	Carbon Monoxide (mg / m ³)
No additive	727	0.07	601
Brominated flame retardant BR-FR (22%)	792	0.37	5,114
Intumescent flame retardant FP-2500S (25%)	99	0.03	373

Chemicals
Polymer Additives

Carbonized layer of foams expands to provide a barrier that protects precious lives and important assets

Intumescent Flame Retardants ADK STAB FP-2000 Series

- Applications**
- All kinds of plastic products and components
- Advantages**
- Inhibits fire spread and heat release rate
 - Reduces smoke
 - Reduces smoke toxicity

Enhanced Fire Safety and Fire Spread Prevention Social Value of Advanced Flame Retardants

Many precious lives are lost from smoke and toxic gas inhalation in fires. Advanced additives that give fire retardant properties to plastics serve to inhibit the spread of fire, as well as inhibit smoke and toxic gases to improve fire safety. With the standardization of EU regulations for railway-related components, reference values have been established for smoke emissions and smoke toxicity for components used near passengers.

With other regions such as China adopting similar standards, the use of advanced flame retardants is expected to grow both for railway and other transportation sectors, and for public facilities.

Intumescent Flame Retardants That Satisfy Advanced Requirements

Intumescent flame retardants realize enhanced flame resistance while reducing smoke and smoke toxicity. They contain phosphorus and nitrogen to form a carbonized layer of foams that provides a barrier to fire.

TOPICS »

ADK STAB FP-2000 Series—World's First Performance Material to Receive UL Verified Mark

Underwriters Laboratories (UL), a U.S.-based safety science company that provides independent, third-party scientific testing services, tested a plastic sample containing ADK STAB FP-2000 Series intumescent flame retardant against a sample mixed with a brominated flame retardant. The testing verified that the plastic sample containing ADEKA's flame retardant generated 99% less smoke and 89% less carbon monoxide. Based on the test results, UL issued a UL Verified Mark that certifies the performance claims for ADK STAB FP-2000 Series.



TOPICS »

ADK STAB FP-900L—Realizing Thin Housings and Cases for Electrical Appliances

The increasing thinning of electrical appliances has created demand for thin housings. ADK STAB FP-900L intumescent flame retardants maintain the strength of components and can be used to reduce thickness and increase flame resistance. This results in engineering plastics that reduce thickness and flammability, making for a more comfortable and safe society.



Feature Value Creation by the ADEKA Group

Food Products

Processed Fat and Oil Products, Processed Foods

Brand Slogan: Taste You Can Rely On

RISU BRAND—Opening Up Possibilities for Breads and Confectionaries



ADEKA entered the food products business in 1929, and in 2006 the Company introduced the RISU BRAND emphasizing safe and secure products with delicious taste. Under the RISU BRAND, ADEKA supplies processed fat and oil products and processed foods that meet the needs of markets in and outside of Japan, while responding to regional preferences and social trends.

Processed Fat and Oil Products	Processed Food Products
<ul style="list-style-type: none"> Fats and oils for breads and confectionaries Fats and oils for frying Fats and oils for pies and pastries Fats and oils for buttercream Fats and oils for fillings Fats and oils for chocolate 	<ul style="list-style-type: none"> Whipping creams Creams for mixing Fillings Sheet fillings Mayonnaise dressing Frozen pie crusts

New Products in FY2019

▶ Marché Clair compound margarine with natural butter flavor



Delicious Products That Meet the Diverse Needs of Customers

ADEKA has chosen "Deliciousness Plus" as its development theme for new products launched in fiscal 2019. The new RISU BRAND products are both delicious and easy to use, to diversely support customers who face changing market conditions. These changes include increasing polarization of the market between high-added-value products and low-priced products, labor shortages driven by low birth rates and aging demographics in Japan, rising ingredient prices, and increasing awareness of product waste.

For example, ADEKA developed a product that is added to whipping cream and can be frozen without losing quality. The end product retains a moist and silky texture and fresh dairy flavor after defrosting, to facilitate scheduled production and save labor.

ADEKA also introduced a margarine that can be easily kneaded into doughs taken straight out of the fridge. The margarine helps to reduce production losses from misshapen baked products as well as reduce the production lead times for baked goods, to improve efficiency and reduce labor.

TOPICS »

Developing Low Trans-Fat Products to Offer More Choices for Customers

Trans-fatty acids (TFAs) are known to increase undesirable LDL cholesterol, which is a risk factor for heart disease. Meat and dairy products contain TFAs, and while there is some research indicating that TFAs have no impact when consumed in limited quantities, the ADEKA Group is leading the industry by actively developing low TFA products.

In 2018, Sociel bakery margarine, which is free of coloring and flavoring agents, received a 48th Food Industry Technology Award of Merit in the category of food products and technology. The awards are organized by Shokuhin Sangyo Shimbusha.

The commemorative shield of the Food Industry Technology Award of Merit



Motoya Nomura
Manager of Suzuka Branch, Pan De Koko Stone Oven Bakery

Voice of the Customer

"Our bakery aims to be a one-of-a-kind, best in the area bakery. We want to create a space that excites customers, where they can smell freshly baked bread the moment they walk in the door.

"Marche Bretagne Naturel is a good product that has the natural taste of butter. It is a low-TFA product with minimal additives that is safe and worry-free. When customers ask me about it, I can honestly and confidently say that we use margarine. I strive every day to bake delicious, handmade bread that is safe for people to enjoy."

Bread made from Marche Bretagne Naturel, a compound margarine with a natural butter taste that contains Breton cultured butter and ADEKA's proprietary flavoring ingredients



▲ Nice One NEO custard filling with a rich taste and silky texture



▼ Blend Whip FC whipping cream for blending with natural cream, ideal for frozen and chilled desserts

TOPICS »

ADEKA Acquires RSPO Supply Chain Certification in April 2018

As a member of the Roundtable on Sustainable Palm Oil (RSPO), ADEKA acquired supply chain certification to ensure the growth and use of sustainable palm oil through cooperation in the supply chain and open dialogue with stakeholders. Under the certification, ADEKA procures ingredients from producers and processors that meet the requirements of the RSPO standard for sustainable palm oil production.



Visiting a plantation with a trading company representative

TOPICS »

Responding to Regional and Cultural Preferences by Supplying Halal and Kosher Certified Products

ADEKA Foods (Asia) Sdn. Bhd. manufactures foods in Malaysia, a nation that is pursuing a strategy of becoming the world's leading halal hub. The company gained halal certification in November 2014, just two years after it was established, and gained kosher certification in August 2017. The company has managed to establish a production framework for the rapid supply of products that meet religious restrictions and cultural preferences.



Participating in a roundtable meeting to promote the halal industry

Feature Value Creation by the ADEKA Group

Received the Publicity Prize from the Public Relations Committee of the Society of Polymer Science, Japan at the 27th Polymer Materials Forum in November 2018

Chemicals Friendly to People and the Environment

Electronics and IT Materials

Organic Solvent-Free Water-Soluble Ultraviolet Curing Material

Applications	Advantages
<ul style="list-style-type: none"> ● Printing inks, coating agents ● Containers and packaging materials ● Photoresist 	<ul style="list-style-type: none"> ● Uses no organic solvents, so it is friendly to people and the environment ● Highly water soluble and superior oxygen barrier ● Patterning can be performed with only water ● Can be hardened using LED light source

Volatile organic compounds (VOCs) have a harmful effect on the human body and the environment, and their use is being increasingly regulated around the world. ADEKA has developed a water-soluble ultraviolet (UV) curing material that employs a proprietary water-soluble molecular structure to eliminate the use of organic solvents. By leveraging ADEKA's organic synthesis and UV curing technologies, the product realizes high water resistance that is difficult to achieve with conventional water-soluble materials. Patterning can be achieved using only water.

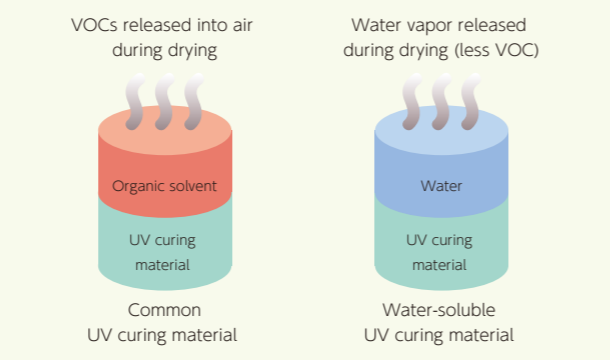
ADEKA is committed to reducing the burden on people and the



Patterning on plastic using ink containing water-soluble UV curing material

environment through the development of products that meet the needs of diverse applications such as for use in printing inks, coating agents, electronics materials, and displays.

Features of Water-Soluble UV Curing Material



New Businesses Addressing Resource Depletion

Energy

Sulfurized Polyacrylonitrile (SPAN) Rare-Metal-Free Active Material

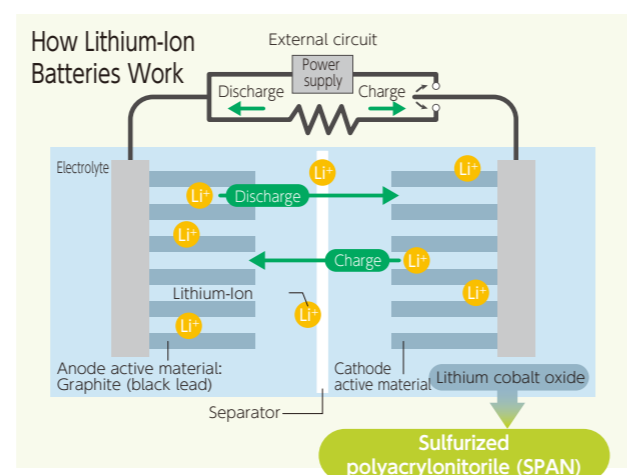
Applications	Advantages
<ul style="list-style-type: none"> ● Lithium-ion rechargeable batteries ● Next-generation rechargeable batteries 	<ul style="list-style-type: none"> ● Rare metal-free ● Lighter, safer, and longer-lasting batteries

Due to the high energy densities, light weight and compact size, lithium-ion rechargeable batteries are used in a variety of electrical products. Continued development is anticipated to further establish lithium-ion batteries as a key technology for realizing a low-carbon society, in applications such as large energy storage systems for renewable energy and as a power source to drive electric vehicles (EVs).

The electrodes on lithium-ion batteries are made from rare metals such as cobalt that are at risk of depletion and vulnerable to price increases. While R&D is being conducted around the world to develop alternative materials, no such materials have reached the stage of practical application. ADEKA is studying the mass production of sulfurized polyacrylonitrile (SPAN),*1 a product of the reaction of polyacrylonitrile (PAN) with sulfur, and has begun to supply evaluation samples.



Rare metal-free active material SPAN



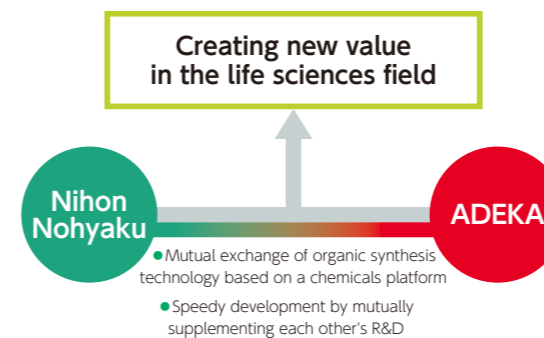
*1. Manufacturing SPAN generates a large amount of hydrogen sulfide, making it difficult to mass produce SPAN. ADEKA is further studying mass production of SPAN using its technology and know-how for processing hydrogen sulfide, and methods developed by the National Institute of Advanced Industrial Science and Technology and Toyota Industries Corporation.

New Businesses ADEKA Group Acquires Nihon Nohyaku

life sciences

Leveraging Synergies to Create New Value

In 1928, the agricultural chemical business of ADEKA and Fujii Seiyaku Co., Ltd. merged to form Nihon Nohyaku Co., Ltd., Japan's first agrochemical manufacturing company. Under its corporate principle of "Contributing to society by ensuring a safe and steady food supply and improving the quality of life for all," Nihon Nohyaku has widely supplied agrochemicals, realized advancements in pest control technology, and promoted the safe and appropriate use of agrochemicals. Nihon Nohyaku has currently expanded into chemicals, pharmaceuticals, and animal health care, with agrochemical manufacturing and sales as its core business. The addition of the agrochemicals business to the ADEKA Group's business portfolio will accelerate the Group's business development in the life sciences field.



Creating Highly Safe, Selective, and Original Agrochemicals

Nihon Nohyaku has direct sales networks in countries in North America and Europe, as well as in other major agricultural producers including Brazil, India, Taiwan, Vietnam, and Colombia. Overseas sales now accounts for more than 50% of its consolidated net sales.

Nihon Nohyaku believes that safe agrochemicals provide selective efficacy on targeted pests with low toxicity and volume. For example, Nihon Nohyaku's insecticide APPLAUD (buprofezin) has a killing effect against plant hoppers, which are rice paddy pests, and whiteflies and scale insects that harm cotton and fruits. However, it does not affect their natural predators such as birds, frogs, and spiders. Nihon Nohyaku has created such highly safe, selective, and original agrochemicals, enabling it to establish a unique position in the agrochemical market.

Launching New Agrochemicals Every Three Years to Contribute to the Stable Supply of Food

Nihon Nohyaku has an ongoing goal of launching new agrochemicals every three years. The company strives to achieve this goal by employing all-around screening*1 to ensure that valuable compound efficacies are not overlooked in drug discovery research. In addition, Nihon Nohyaku is actively pursuing exchanges with external organizations, such as pursuing open innovation with universities and public research institutions.

The global population is projected to rise to 9.7 billion people by 2050. The need for new agrochemicals is increasing in an effort to secure sustainable food production and quality. However, only the major U.S. and European multinational corporations and a few Japanese companies can develop new agrochemicals, which require advanced synthesis and screening technology together with extensive expertise. Nihon Nohyaku is generating international interest in its advanced agrochemical development capabilities.

TOPICS >>

Product Development and Technical Sales Working Together to Solve the Issues of U.S. Customers

Nichino America, Inc. was founded in 2001 for the sales and support of Nihon Nohyaku's products in the U.S., which is a major agricultural producer and the world's largest crop exporting country. Technical sales representatives identify issues with existing disease protection through their discussions with customers and provide customized protection programs, thereby building trust with customers.

Peanut farmers in the state of Georgia have struggled for many years with soil-borne white mold, which has led to significantly reduced crop yields. Nichino America's product development team collaborated with the University of Georgia to conduct numerous field trials that established the efficacy of Convoy as a fungicide for white mold. The company made a proposal to a major peanut farmer in the state of Georgia to apply Convoy twice at 30-day intervals, and this successfully stabilized crop yields.



*1. All-around screening: A method in which one compound goes through an evaluation process that covers a wide range of fields including insecticide, fungicide, and herbicide.

ADEKA in Our Lifestyles

The ADEKA Group embraces the basic principles of creating products that have a low environmental impact and are easy to use. Ever since it was founded, the Group has sought to use the most advanced technology to make the world a better place. By expanding into foods (processed oils and fats), organic chemicals, fine chemicals, and life sciences, the ADEKA Group will continue to do business that supports people's lives.

■ Chemical business ■ Food business ■ Life sciences business



Protecting Infrastructure

Materials that prevent water from penetrating concrete structures and reinforce the ground at construction and civil engineering worksites

Water swelling sealing and soil injection materials



Small Indulgences

Optimal ingredients for confectionaries and cakes, such as processed oils and fats that give cookies their crunch

Whipping cream, fats and oils, etc.



Delivering More Delicious Foods to Your Table

Fat and oil products that create what we refer to as "deliciousness," such as fluffy, moist bread that is crispy on the outside

Margarine, shortenings, fillings, etc.



For a More Comfortable Living Environment

Materials for addressing sick-house syndrome, high-definition displays and manufacturing plastic products used in daily life that are less likely to catch fire, and thereby contribute to safer, more secure and affluent lifestyles

Water-based resins, photoinitiator and polymer additives (flame retardants, etc.)



Safer and More Energy-Efficient Cars

Materials that contribute to reducing vehicle weight and CO₂ emissions for improving safety and fuel efficiency and reducing environmental impact

Polymer additives (nucleating agents, plasticizers, etc.), lubricant additives and water-based coating agents



In All Corners of Your Office

Materials used in various daily office supplies such as paper, stationery, computers and desks

Hydrogen peroxide, polymer additives, etc.



Building an Advanced IT Society

Materials essential for advancing the digital age, such as IoT and AI, used in IT equipment and displays

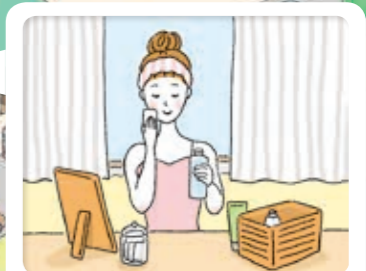
Semiconductor materials, circuit materials, photo(light)/thermal curing resin, high-purity etching gas/chemicals, polymer additives, etc.



Supporting Urban Development

Metal rust inhibitors such as for bridges, and concrete sealants that increase the durability and maintain the aesthetic appearance of buildings and infrastructure

Epoxy resins and urethane resins



Staying Beautiful and Healthy

Materials indispensable for cosmetics, toiletry products, pharmaceuticals and products that offer various functions, which ensure safety

Cosmetic ingredients (thickening and moisturizing agents, etc.), propylene glycols and health foods



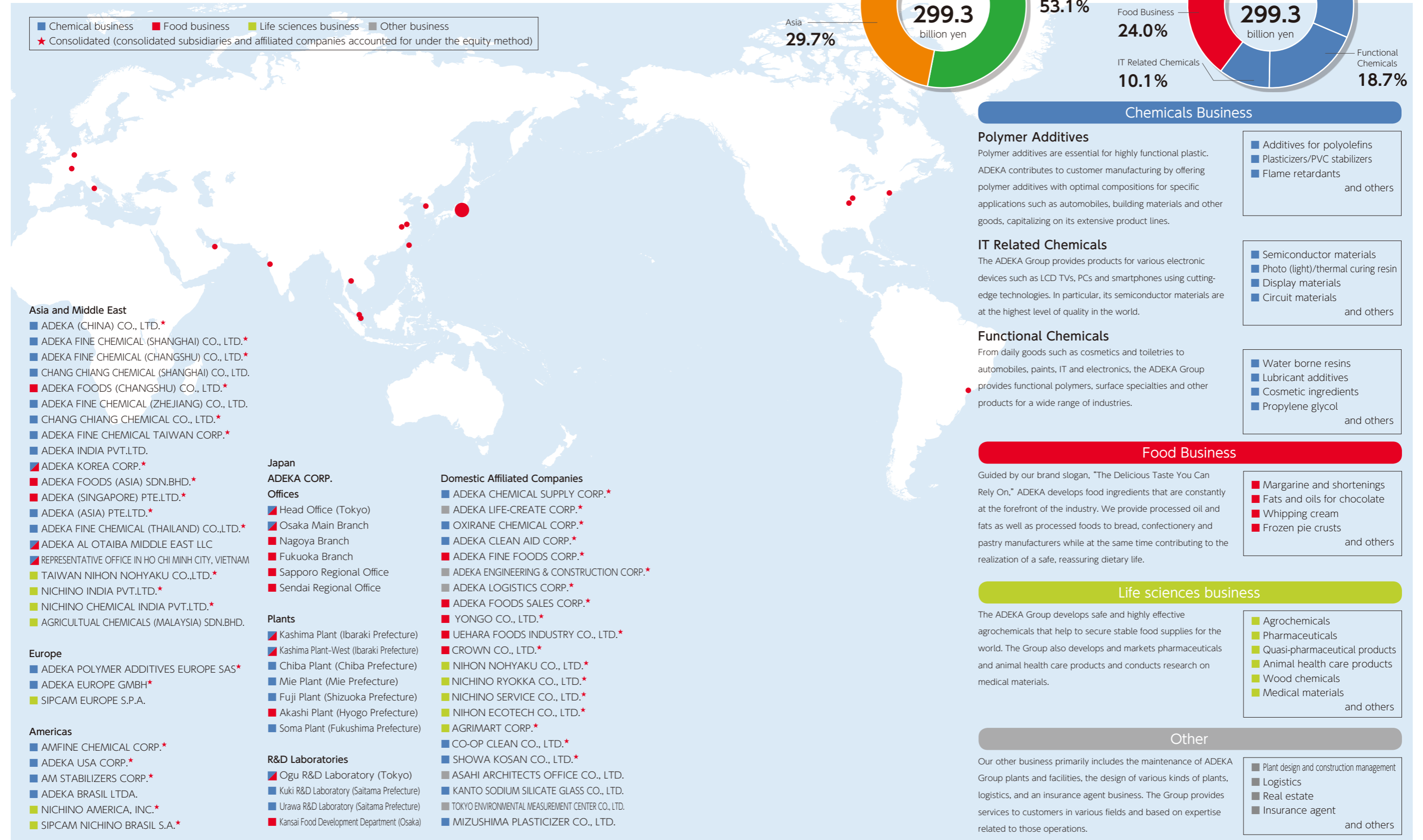
Stable Food Supply

Pesticides that control crop-damaging insects to maintain yields and quality, helping to secure a stable food supply globally

Agrochemicals, pharmaceuticals

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 the scope of our business and develop our overseas operations.



Realizing the ADEKA Vision 2025

The ADEKA Group has outlined the ADEKA Vision 2025 with the stated goal of becoming “a global company that creates value for tomorrow and contributes to affluent lifestyles through innovative technologies” by 2025. The Group has been implementing the BEYOND 300 Mid-term Management Plan since April 2018 and is now in the second phase toward realizing the vision. Guided by its management policies, the Group will strive to create social value and corporate value with stakeholders through the value chain, while increasing communication with stakeholders.

Leveraging the Power of Corporations to Tackle Social Issues

The 2030 Agenda for Sustainable Development calls on all countries and stakeholders to make every effort to achieve the Sustainable Development Goals (SDGs) by 2030. Businesses are being asked to apply their technology, capital, human resources, and networks to address social issues. The ADEKA Group endorses the SDGs and is endeavoring to foster a corporate culture in which employees are constantly evaluating the contributions they can make through the value chain.



Backcasting

Formulating and revising the management strategy to realize the vision

Aspirations for 2025

[ADEKA VISION 2025]

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

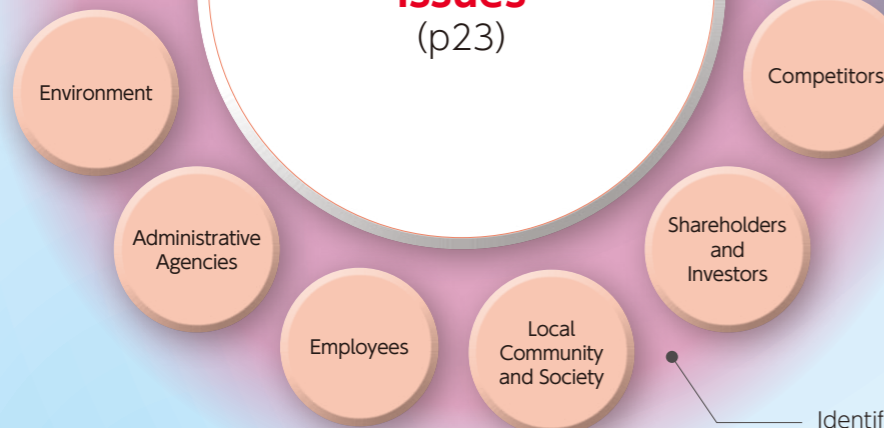
Create Social Value
Help to address diverse issues toward the creation of a sustainable society
(Achieve the SDGs)

Create Corporate Value
Expand the business of the ADEKA Group and enhance the brand image

Management Policy

To be a company that is progressive and dynamic with a keen attitude towards the new changing tide
Creating a better future for the people of the world

CSR Priority Issues (p23)



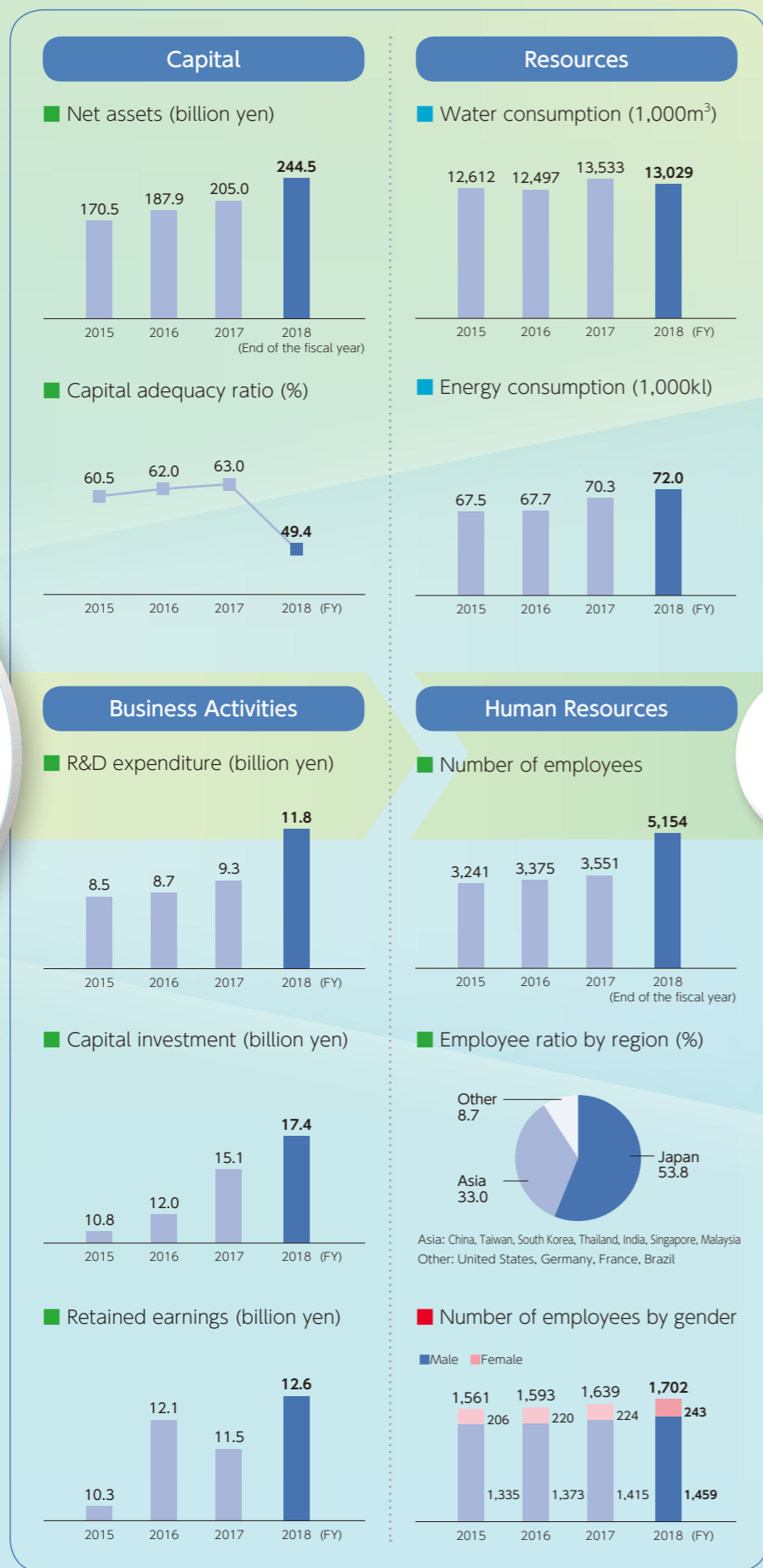
Management Strategy Mid-term Management Plan BEYOND 300 (p22)

Value Chain Process for creating value through business activities



Value Share with Stakeholders

Management Resources



INPUT

Value Chain

OUTPUT Creation of Value

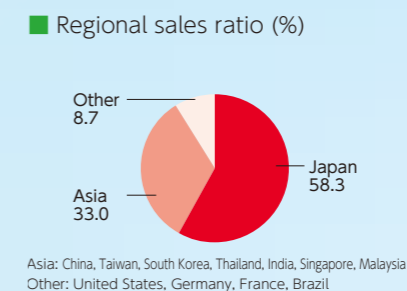
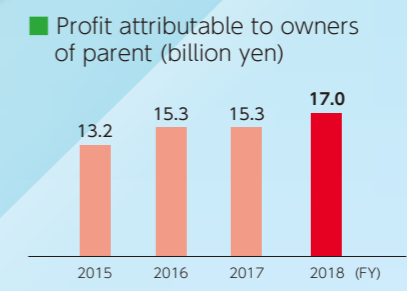
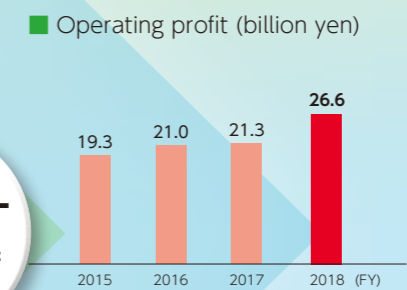
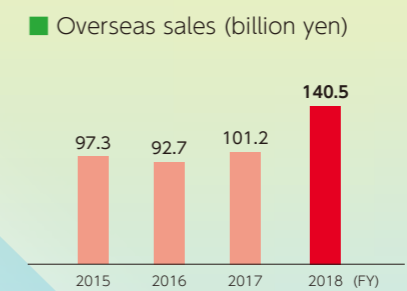
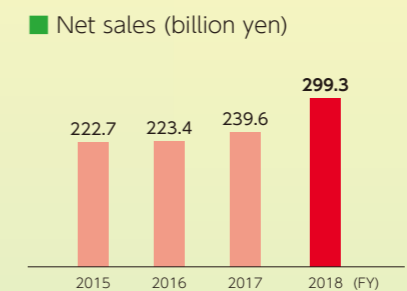
These graphs present the main business resources mobilized by the ADEKA Group in fiscal 2018, and the key value created through the value chain to share with stakeholders.

Scope indicated by color:

- ADEKA
- ADEKA Group (consolidated)
- ADEKA and 11 ADEKA Group companies

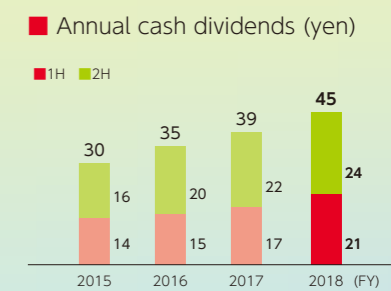
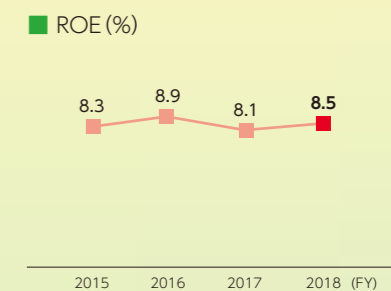
Please refer to pages 13 and 14 for consolidated companies.

Shareholders and Investors/Business Partners/Customers and Consumers

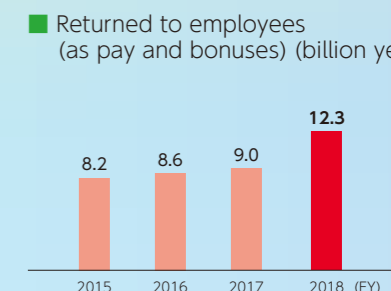


Asia: China, Taiwan, South Korea, Thailand, India, Singapore, Malaysia
Other: United States, Germany, France, Brazil

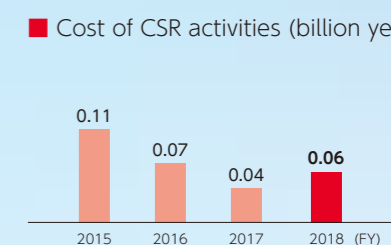
Shareholders and Investors



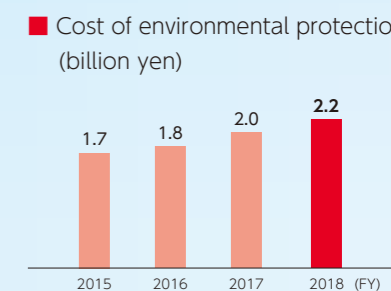
Employees



Local Community



Environment





Working with Stakeholders to Create Essential Value and Realize a Sustainable Society

Hidetaka Shirozume

President and Chief Operating Officer

The ADEKA Group's Vision for Excellence

Under the BEYOND 300 Mid-term Management Plan that we are implementing from fiscal 2018–2020, the ADEKA Group is aiming to become an excellent company with net sales of 300 billion yen. When we say excellent company, we mean a corporate group that creates new value together with its stakeholders.

The ADEKA Group is committed to contributing to society by developing and supplying advanced technologies and products that help to solve diverse social issues, which will enhance our corporate value. We believe that our target of exceeding 300 billion yen in consolidated net sales is achievable by contributing to society through our business.

Progress in Implementing BEYOND 300

ADEKA is implementing the BEYOND 300 plan, which outlines the management goals of exceeding 300 billion yen in consolidated net sales through organic growth by fiscal 2020. The Group is also seeking to realize an operating income margin of 10%, ROE of 10%, and a dividend payout

ratio of 30% (gradually increasing the payout ratio to this percentage in fiscal 2020). In terms of investment and finance, we have planned for 100 billion yen in expenditures over the three years of the plan (comprising 50 billion yen each in capital investment and M&A funds).

The ADEKA Group acquired the Nihon Nohyaku Group in September 2018. As a result, it recorded consolidated net sales of 299.3 billion yen, up 24.9%; operating profit of 26.6 billion yen, up 24.9%; ordinary profit of 26.6 billion yen, up 19.1%; and profit attributable to owners of parent of 17.0 billion yen, up 11.1% (all percentages are year on year). Each of these results marks an all-time high. Although the consolidated net sales figure is close to the target that we set in the final year of the mid-term management plan, our actual aim is to record 300 billion yen in net sales through organic growth. We will increase our efforts to achieve the said goals by expanding our three main businesses of polymer additives, chemical products, and food products. In each business, we will designate strategic product lines through which we will accelerate our global contributions to society.

Practicing CSR and Setting Priority Issues to Strengthen the Management Platform

The ADEKA Group recognizes the importance of corporate social responsibility (CSR) next to its management policies. The BEYOND 300 plan directs the Group to promote CSR by incorporating it into the management policies, which will strengthen the management platform. We have therefore set out to prepare a framework for contributing to society in order to earn greater trust from all stakeholders throughout society.

In April 2019, we established a CSR Committee that comprises the full-time directors of ADEKA Corporation with me as chair and a CSR Promotion Subcommittee that comprises the division heads. We are currently in the process of identifying CSR priority issues that the Group will address. Factored into this process are the SDGs that were adopted by the United Nations in 2015 and the concept of environmental, social, and governance (ESG) initiatives. To identify the CSR priority issues, we are plotting the social issues on a matrix, with the importance to stakeholders (social demands) on one axis and the importance to the ADEKA Group's business on the other axis. Once we have defined the priority issues, we will set out to address them through our business activities and create value through the sustainable growth of the ADEKA Group.

The next mid-term management plan will designate targets of each business division that are aligned with the CSR priority issues. The targets will be linked to the fiscal year plans, and we will execute plan-do-check-act (PDCA) cycles. Through these measures, we will strengthen the management platform, contribute to society, and earn greater trust from society.

Promoting Globalization and Localization to Create a Better Future for the People of the World

One of the management policies of the ADEKA Group is to "create a better future for the people of the world." It means that, beyond simply developing our business globally, we will strive to be an excellent global company that creates corporate value and social value together with people in the communities that we do business in.

BEYOND 300 calls for the ADEKA Group to expand globalization and accelerate localization. We are strengthening our Group governance and risk management, and developing and utilizing global human resources. In fact, this strategy has been carried out since the fiscal 2012–2014 mid-term management plan. During this time,

we have been developing both our global human resources and local personnel. With their contributions, the percentage of consolidated net sales from markets outside of Japan increased to 46% in fiscal 2018, with more than 40% of our entire workforce based outside of Japan. We have also expanded our network of subsidiaries outside of Japan to 28 companies operating in 13 countries and regions, showing the progress we are making in pursuing further globalization.

We are accelerating localization through strategies that bring us closer to our customers. This approach centers on localization through the establishment of local development centers, manufacturing facilities, and sales offices to serve customers who need ADEKA's products and in areas where there is demand, so that we can provide more detailed support. On the development side in particular, we established technical service centers for both the chemicals and foods businesses. They have enabled us to respond more quickly and precisely to customer requests, and this service has been praised by customers. Local personnel are critical to ensuring that we can speak to customers in their language and adhere to their customs so that we can precisely understand and respond to customer requests. We are transferring skills and knowledge to local staff by sending personnel from our head office and having them work alongside local staff.

Generally speaking, job hopping is more prevalent outside of Japan, and staff retention rates are lower. By contrast, we have high retention rates among local staff working for our overseas subsidiaries. When I visit our overseas subsidiaries, I am amazed at how motivated our local staff is. Their passion is evident when they tell me that they want to increase their skills, meet the requests of their customers and have a positive social impact on their country through their work in the ADEKA Group. One of my major tasks is to ensure that we have an environment and systems in place where positive-minded and motivated local employees can dedicate themselves to their work.

Accelerating localization in a broad sense requires adapting to the local area. We must have an understanding of such things as the culture, religions, living customs, and national traits to execute production activities that have a positive effect on that country or region. The ADEKA Group will continue working to earn recognition for its positive contributions to local communities in different countries.

Message from the President

Identifying New Tides by Taking a Broader View of the Supply Chain

The other managing policy of the ADEKA Group is to “be a company that is progressive and dynamic with a keen attitude toward the new changing tide.” To identify these changes, we must take a broad view of the entire supply chain and understand the business platform that we are standing on. Furthermore, we must adopt a broader view that encompasses the customers and end users beyond our direct customers—a view that also encompasses all the suppliers who are involved in providing raw materials. If we can then conduct our business activities knowing the markets for a given product as well as its value proposition and to whom it offers value, together with how it is useful to society, we will naturally come to recognize the changing tide.

For example, ADEKA Sakura-Lube used as a simple engine oil additive realizes a 1.7% improvement in fuel economy on average, without modifying how internal combustion engines work. If we shift our perspective beyond simply improving fuel economy, to look at the positive contribution to society from reducing CO₂ emissions, then we can realize that ADEKA Sakura-Lube annually saves the equivalent of roughly six times the entire CO₂ emissions of all the production facilities of the ADEKA Group.

By changing our perspective of a product from that of improving fuel economy to a product that can immediately help to reduce CO₂ emissions, we can see that the platform we stand on can help to address a global-scale social issue. However, ADEKA Sakura-Lube is only used in 10% of all vehicles. If every vehicle were to use engine oil containing ADEKA Sakura-Lube, it would save CO₂ emissions every year that are equivalent to more than 5,000 times the volume of the Tokyo Dome, a major-sized stadium.

We are in the midst of a tidal shift from gasoline engine vehicles to electric vehicles (EVs) and fuel cell vehicles, and ADEKA is developing and supplying innovative materials to realize this tidal shift. At the same time, it will take a very long time before gasoline engine vehicles completely disappear. In the meantime, we have an important responsibility to ensure that we do whatever we can to contribute to society. The issue is whether we are seeing things from such a perspective and whether we are conducting our business activities

while being fully conscious of the need to contribute to society.

The ADEKA Group supplies diverse products to diverse markets. For some products, like with ADEKA Sakura-Lube, we have already adopted a broad view of the supply chain and have a grasp of the business platform. At the same time, we have many businesses in which our perspective only extends to the direct suppliers and customers that we deal with, due to our focus on B2B business.

This past year, I have repeatedly emphasized that we must take a broader view of the supply chain for our products, while fully recognizing the business platforms that we stand on. I have also emphasized that we must share this recognition with the entire business unit rather than keeping it to ourselves, and that we must contribute to society.

We are not even halfway there yet, but I am starting to see signs within the company that things are changing and that we are beginning to use this approach to conduct our business activities. If we take the small changes that we are making individually within the ADEKA Group and apply them to our entire business activities and then to the entire supply chain, we can bring about major change and contribute greatly to society.



BEYOND 300 Mid-Term Management Plan (FY2018–2020)

The BEYOND 300 plan is the second phase of the ADEKA Group’s plan to realize the ADEKA VISION 2025. The Group will endeavor to surpass net sales of 300 billion yen and further expand its business by the end of fiscal 2020 through organic (independent) growth.



Basic Policies

Become an excellent company with sales exceeding 300 billion yen.

- The second stage toward realizing the ADEKA VISION 2025
- Three years with net sales exceeding 300 billion yen due to organic growth. Promote M&A separately.

Basic Strategies

Global Expansion of Three Main Businesses

- Globally expand sales of strategic products defined for each of our three main businesses; polymer additives, chemical products, and food products.

Entering New Domains

- Build business models and promote commercialization in the target domains of life sciences, the environment and energy.

Enhancing Our Management Foundation

- Promote CSR to strengthen our contribution to society and trust from society. Enhance mutual cooperation within the ADEKA Group to leverage our comprehensive abilities.

Five Measures

Corporate Management ▶ Enhancing Group corporate management

Cultivate common values for the ADEKA Group, establish systems and structures and enhance Group corporate management.

Global Business Development ▶ Expanding globalization and accelerating localization

Further expand globalization of procurement, production and sales while accelerating the growth of individual overseas subsidiaries.

Technology ▶ Creating innovation and enhancing competitiveness

In order to perpetually create products required by society, enhance R&D, promote new business development and intensify or inherit production technologies.

Human resources ▶ Expanding global human resources and leaders

Continuously invest in human resources as a corporate asset to expand global human resources and leaders.

Corporate value ▶ Promoting CSR and mutually developing with society

Improve our CSR promotion system, contribute to the solving of problems in society through our business and utilize these efforts to achieve continuous growth.

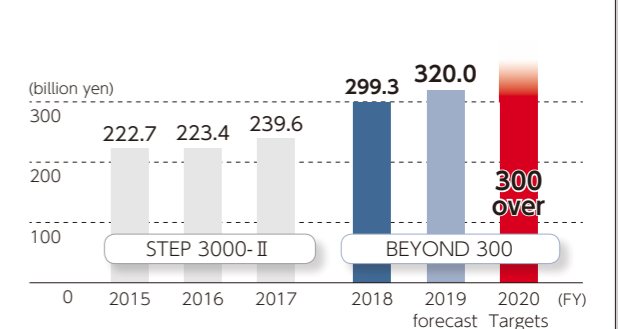


Management Targets (Fiscal 2020)

Consolidated sales	Over 300 billion yen (via organic growth)
Operating profit ratio	10%
ROE	10%
Investment and finance	100 billion yen (three-year total) Breakdown: capital investment: 50 billion yen (three-year total) M&A funds: prepared with 50 billion yen as the limit (three-year total)
Dividend	Dividend payout ratio: 30% (target for the final year of the mid-term plan after incremental increases) Appropriate shareholder returns are determined after comprehensive consideration

	Results for FY2018	forecast for FY2019	Targets for FY2020
Consolidated sales	299.3 billion yen	320.0 billion yen	300.0 billion yen over
Operating profit ratio	8.9%	7.0%	10%
ROE	8.5%	7.2%	10%

Consolidated sales



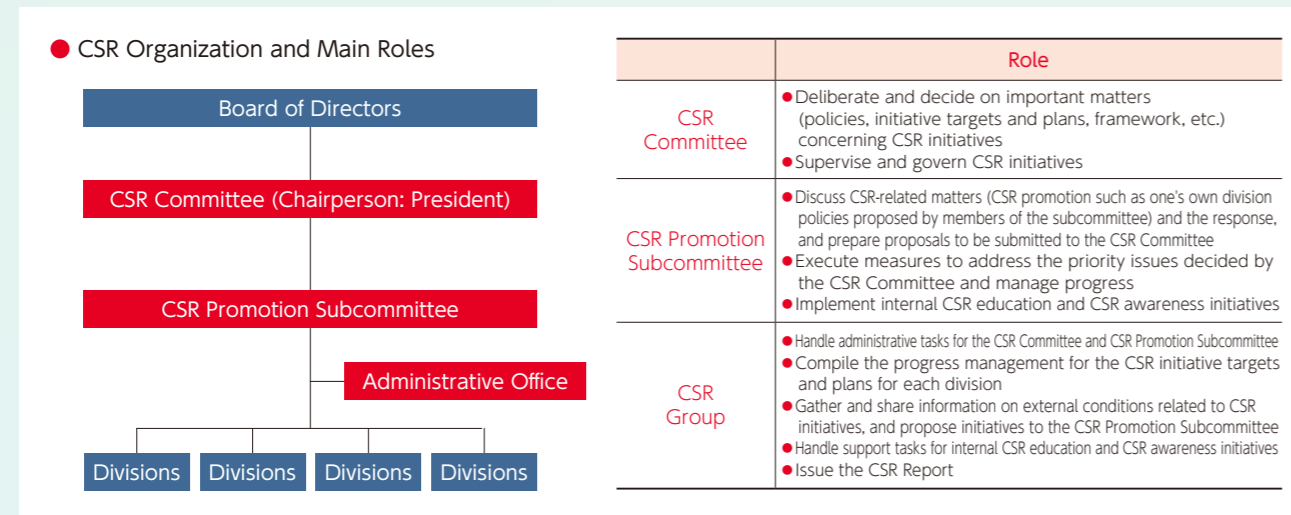
CSR Priority Issues

The external conditions surrounding businesses are rapidly changing, as stakeholders increasingly focus on the ESG initiatives of corporations. These initiatives encompass efforts to address diverse social issues, reduce greenhouse gas emissions, protect human rights, encourage diversity, and practice corporate ethics.

In order for the ADEKA Group to help create a sustainable society and fulfill its corporate vision, the BEYOND 300 plan outlines a basic strategy to strengthen the management platform by practicing CSR. Under this strategy, the Group is practicing CSR-guided management and establishing a framework from which to address social issues. In July 2018, the Group established a CSR Promotion Team to facilitate internal awareness of CSR and discussion of the direction of the Group's CSR initiatives. In April 2019, the Group

established a CSR Committee to make decisions on important CSR policies, and a CSR Promotion Subcommittee that is responsible for promoting Group-wide CSR initiatives. The Group is currently working to identify CSR priority issues that prioritize the social issues that the Group will address.

Moving forward, the Group will set key performance indicators (KPIs) for the CSR priority issues, to guide its concrete initiatives. In addition, the Group will implement PDCA cycles to improve these initiatives and will further anchor the initiatives by reviewing the fundamental CSR policy. The next mid-term management plan starting in fiscal 2021 will reflect the CSR priority issues and further integrate CSR into the management approach, in order to increase corporate value and enhance competitiveness.



● Schedule for Determining CSR Priority Issues and Promoting Adoption

	2019	2020	2021
1. Identify priority domains and priority issues	→		
2. Study the priority domains and priority issues thoroughly	→		
3. Establish KPIs		→	
4. Disclose the decision-making process	→	→	→
5. Review the fundamental CSR policy	→	→	
6. Issue the CSR Report	→	→	→
7. Assemble the next mid-term management plan (reflecting CSR initiatives)		→	→
8. Launch the next mid-term management plan			→

The next mid-term management plan starting in fiscal 2021 will include KPIs and non-financial targets in the divisional plans and will further integrate CSR into the management approach to increase the corporate value.

Decision-Making Process for CSR Priority Issues

STEP 1 **Extracting Potential CSR Priority Issues**

Based on international guidelines, benchmark case studies, investment-related indexes, and internal interviews, thoroughly examine the ESG risks and opportunities in the corporate activities of the ADEKA Group.

Social Issues

GRI standard	SDGs	ISO26000
DJSI	FTSE ESG	CDP
Benchmark of 6 companies	Interview ADEKA divisions	

Thoroughly examine the items that society expects corporations to address

Select 38 items as potential CSR priority issues

STEP 2 **Scoring and Visualizing the CSR Priority Issues**

Through discussions in the CSR Committee, CSR Promotion Subcommittee, and internal divisions, sort the items based on the importance to the ADEKA Group's stakeholders on one axis and the importance to the Group's business on the other axis

Social Issues That Should Be Prioritized

<ul style="list-style-type: none"> Stable procurement of raw materials Production technologies Climate change (including energy conservation) Eco-friendly products Environmental safety Appropriate management of chemical substances Facilities safety Diversity and diverse human resources Work-style reforms and fair compensation Labor safety Human resource development 	<ul style="list-style-type: none"> Human rights Contribution to communities Compliance with social and economic aspects Quality and safety Customer satisfaction and dialogue with customers People- and environment-friendly R&D Business continuity management Food security and safety, food loss measures Health and longevity Intellectual asset management
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STEP 3 **Identifying Priority Domains and CSR Priority Issues**

Categorize the CSR priority issues according to each ESG aspect and each related priority domain

Classification	Priority Domain	Priority Issues
E	Environment	Supply eco-friendly products
		Conserve global environment
S	Human rights, human resources	Respect human rights
		Expand the opportunities for utilizing human resources
	Better living conditions Communication	Create value that meets society's expectations
G	Governance	Conduct dialogue with stakeholders
		Enhance Group governance and risk management

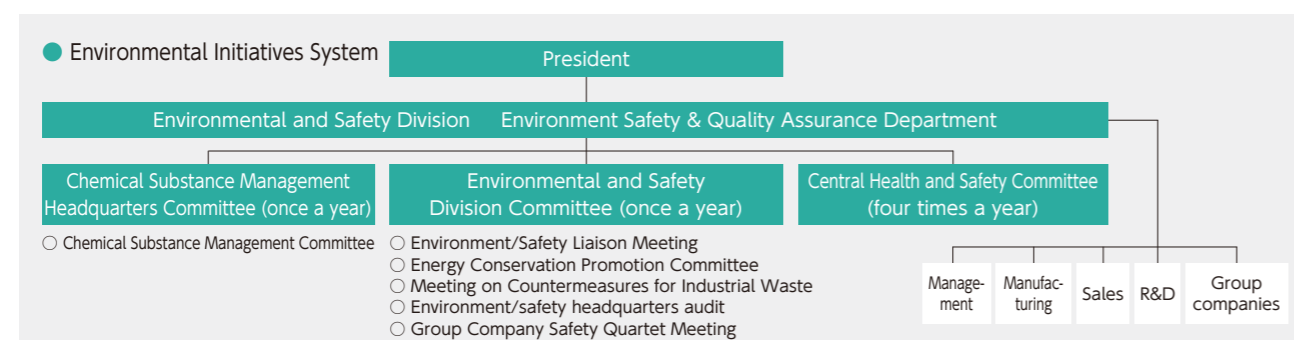
The Group will manage each of the CSR priority issues by designating CSR initiative targets. With the understanding that safety is always the highest priority in sustaining its corporate activities, the Group strives to secure the safety of its employees and communities as well as ensure the security and safety of all persons in the supply chain, from production through to consumers.

With the Environment

The ADEKA Group, which uses chemical substances and palm oil as raw materials, cares about the environment throughout the process of procurement and from production to disposal. Toward realizing a sustainable society, we are developing products with less environmental impact and engaging in energy-saving initiatives.

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



Targets and Results for Fiscal 2018 and Targets for Fiscal 2019

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

Item	Targets for FY2018	Results for FY2018	Self-evaluation	Targets for FY2019
Promote energy conservation	■ Reduce energy intensity by 1.0% or more year on year (seek a 3% reduction by FY2020 from the FY2017 level)	■ Energy intensity of 0.1859 kJ/t (4.6% increase year on year)	△	■ Reduce energy intensity by 1.0% or more year on year (seek a 3% reduction by FY2020 from the FY2017 level)
	■ Reduce CO ₂ emission intensity by 1.0% or more year on year (seek a 3.0% reduction by FY2020 from the FY2017 level)	■ CO ₂ emissions intensity of 0.420 t-CO ₂ /t (4.7% increase year on year)	△	■ Reduce CO ₂ emission intensity by 1.0% or more year on year (seek a 3.0% reduction by FY2020 from the FY2017 level)
Reduce industrial waste	■ Promote and maintain zero emissions through recycling	■ Landfill disposal volume at 35.3 tonnes (0.067% 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)	■ Food waste management was added as a new product liability audit item, and the audit confirmed that proper controls to prevent resale were in place		■ Promote appropriate disposal of industrial waste (reviewing contracts, inspecting subcontractors, preventing resale of food waste, and other actions)
Promote green purchasing	■ Achieve 95% food recycling rate by FY2020 (target for food manufacturers)	■ Food recycling rate at 94.9%	○	■ Achieve 95% food recycling rate by FY2019 (target for food manufacturers)
	■ Achieve a green purchasing rate of 80% or more for 43 designated stationery items	■ 81.3% (9,551 items among 11,754 items purchased)		Stationery had been designated as a green purchasing target, but the target was withdrawn due to its small impact on the global environment. Moving forward, the Group will further incorporate environmental criteria into its raw material procurement to further strengthen its efforts to realize a sustainable society.

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

Environmental Initiative System

Under the annual policy determined by the Environmental and Safety Division, each office of the ADEKA Group formulates an execution plan and conducts environmental management activities that meet local needs. The Environmental and Safety Division conducts an annual audit of the Group companies which have offices and plants inside Japan.

In fiscal 2018, the annual audits were expanded to overseas subsidiaries and conducted at three companies in Europe, the U.S., and Middle East. In fiscal 2019, the Group is planning to convene a Global Meeting on the Safety Quartet, for environmental and safety managers of overseas companies to share their knowledge and perspectives.



Initiatives on Global Warming Prevention

Initiatives for Reducing CO₂ Emissions

The ADEKA Group seeks to reduce its emissions of CO₂, a greenhouse gas that wreaks havoc on a global scale. Each of the Group operation sites has its own annual reduction target and is engaged in raising production efficiency or other improvement activities. The progress of those activities is checked through plant audits conducted by the president and the Environmental and Safety Division.

In fiscal 2018, the ADEKA Group's production volumes decreased by 2.7% year on year, while CO₂ emissions from production activities increased by 1.9%. As a result, the CO₂ emissions intensity increased by 4.7%. This was due to an increase in the manufacturing of high-quality and high-added-value products that consume more energy in manufacturing.

Energy Saving Activities

The Energy Conservation Promotion Committee organized a visit to the Mie Plant in order to share information on energy conservation initiatives.

In fiscal 2018, ADEKA saved 760 kl of energy through the implementation of energy conservation initiatives, despite an increase in energy consumption at ADEKA plants due to changes in the product mix and bringing new facilities online.

Initiatives by Major Sites in Fiscal 2018

Sites	Initiatives
Kashima Plant	<ul style="list-style-type: none"> ● Reduced electricity consumption by turning off lighting and HVAC systems when not needed ● Reduced steam consumption by insulating steam pipes
Kashima Plant-West	<ul style="list-style-type: none"> ● Reduced electricity consumption by upgrading ice thermal energy storage system
Chiba Plant	<ul style="list-style-type: none"> ● Reduced electricity consumption by switching to LED lighting
Mie Plant	<ul style="list-style-type: none"> ● Reduced steam consumption by reassessing boiler operation control settings ● Reduced electricity consumption by upgrading utility equipment
Fuji Plant	<ul style="list-style-type: none"> ● Reduced steam consumption through thermal recovery of electrolyzer

CO₂ Reduction through our 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. It indirectly contributed to the CO₂ reduction of approximately 1.58 million tonnes during fiscal 2018, a volume equivalent to six times the volume of CO₂ emitted by ADEKA's plants that year.

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 manufacturing processes and by complying with relevant laws and regulations to reduce the environmental impact.

The Ogu R&D Laboratory is scheduled to upgrade its aging wastewater treatment system in fiscal 2019.

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.

Properly Managing the Disposal of Industrial Waste

ADEKA and its Group companies in Japan conduct regular inspections of industrial waste disposal contractors to verify that contractors are properly disposing of industrial waste. Furthermore, checks are conducted to verify that waste is being properly managed at business sites.

In fiscal 2018, ADEKA further worked to reduce its environmental impact by facilitating the sales of bleaching clay containing oils and fats from the Kashima Plant, and partially switching the wastewater treatment at the Mie Plant from external incineration to on-site activated sludge treatment.

ADEKA Joins the Clean Ocean Material Alliance

In order to reduce ocean plastic waste, it is important to promote the sustainable use of plastics and accelerate the development and spread of alternative materials such as bioplastics and paper products that offer superior biodegradability.

ADEKA is part of the Clean Ocean Material Alliance, which was established under the leadership of the Ministry of Economy, Trade and Industry of Japan. The Alliance serves as a platform for accelerating innovation by enhancing cross-industry collaboration between a wide spectrum of stakeholders. ADEKA is leveraging its accumulated R&D capabilities from the development of plastic additives in order to develop alternative materials.

Promoting Biodiversity

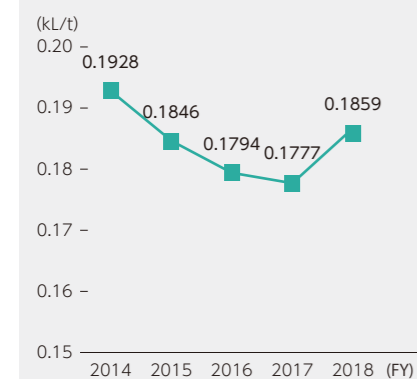
In accordance with the ADEKA Group Biodiversity Policy, the Group conducts initiatives to promote the preservation of biodiversity and its sustainable use. ADEKA has joined the Japan Business Initiative for Biodiversity and is exchanging information and building connections with various member companies.

ADEKA Group Biodiversity Policy

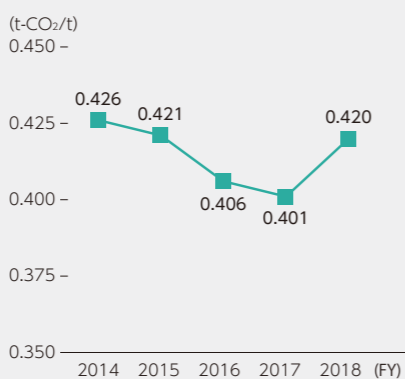
1. Consider biodiversity when procuring naturally derived raw materials
2. Promote activities for conserving biodiversity at our business premises
3. Strive to develop biodiversity-oriented products
4. Work in collaboration with local communities

Environmental Data

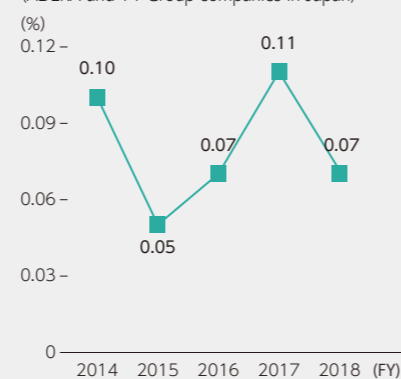
Energy Intensity Index
ADEKA (the manufacturing division alone)



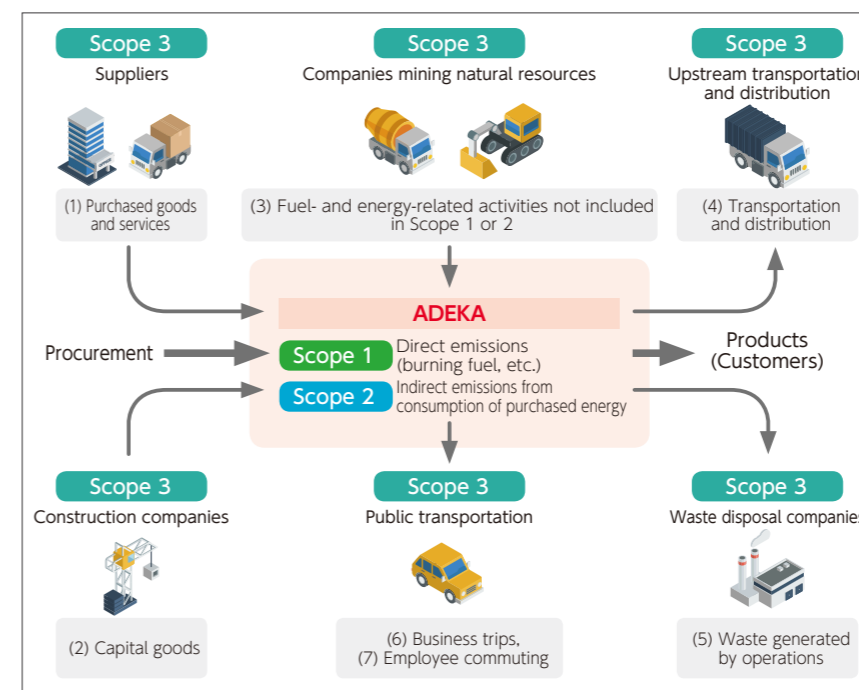
GHG emission Intensity Index
ADEKA (the manufacturing division alone)



Zero Emissions Rate for Landfill Disposal of Industrial Waste
(ADEKA and 11 Group companies in Japan)



Flow Chart of ADEKA's Scope 3 Emissions

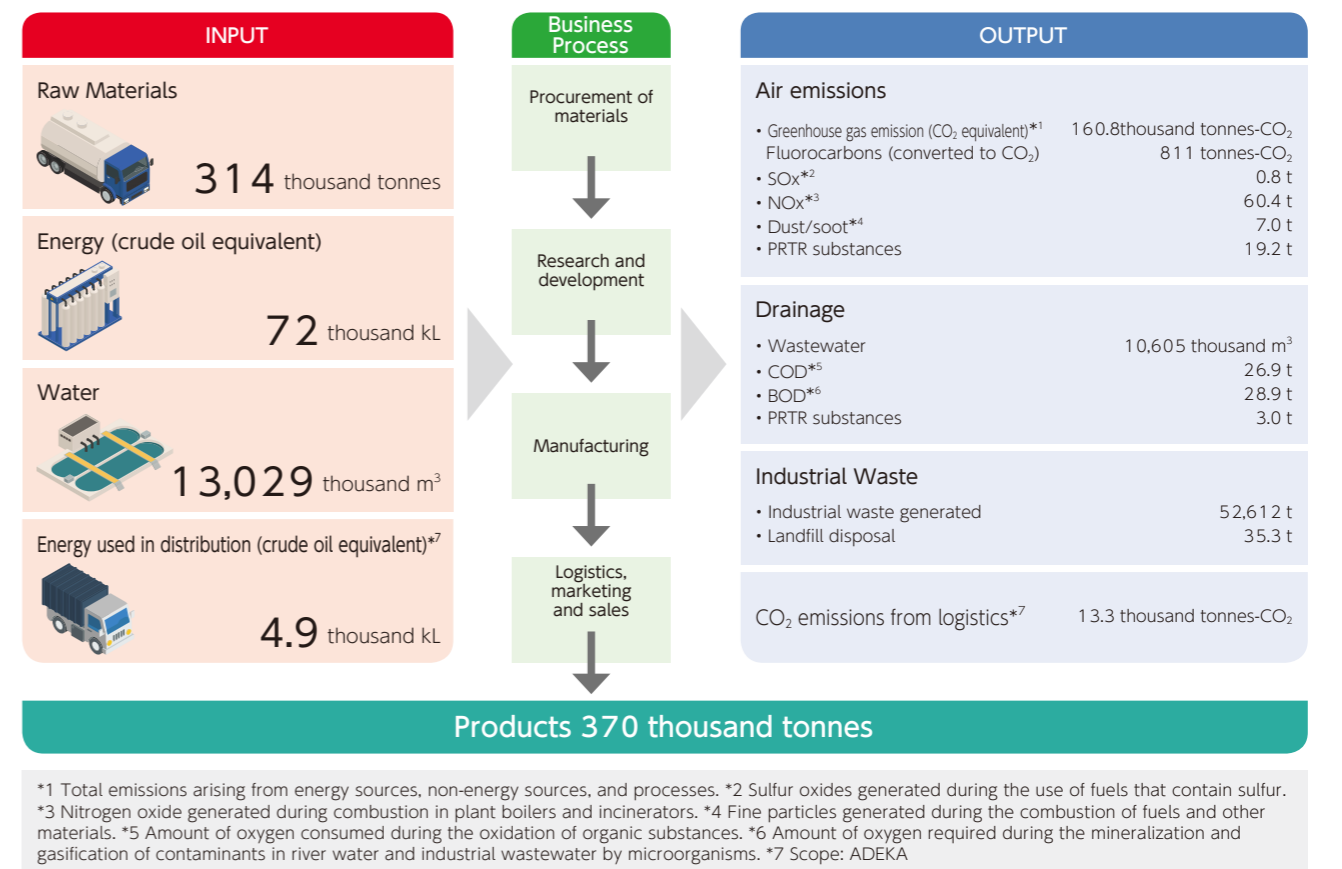


CO₂ Emissions and Scope 3 Breakdown (scope: ADEKA)

(Unit: thousand tonnes-CO₂)

Scope category	Emissions
Scope 1	64.3
Scope 2	90.5
Scope 3	841.2
Category 1 Purchased goods and services	765.3
Category 2 Capital goods	37.7
Category 3 Fuel- and energy-related activities not included in Scope 1 or 2	12.7
Category 4 Transportation and distribution	13.0
Category 5 Waste generated by operations	11.7
Category 6 Business trips	0.2
Category 7 Employee commuting	0.6
Total	996.0 thousand tonnes-CO₂

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



With Customers

As a materials manufacturer for chemical and food products, the ADEKA Group provides safe, highquality products that live up to customer expectations. We strive to develop systems and products as we work together with customers to identify and tackle the issues they face.

Quality and Safety Policy for Fiscal 2018

1. Implementing measures to prevent reoccurrence of claims/complaints and horizontal deployment of measures within and between plants
2. Providing accurate product information based on strengthened management of information about raw materials and products
3. Strengthening the quality control framework, particularly by unifying the procedures for entering inspection values into the system across the Group, and preparing regulations for overseas subsidiaries

Quality and Safety Initiatives

Promoting Quality Improvement Efforts

The ADEKA Group promotes voluntary activities to improve quality safety*1 by ensuring Safety Quartet (occupational, environmental, quality and equipment safety). As an assurance of product quality, the Group has acquired ISO 9001 certification for quality management systems for 22 Group companies in and outside of Japan, in order to maintain and continuously improve quality assurance systems. Additionally, the

Group has acquired FSSC 22000 certification for seven companies and HACCP certification for three companies, to ensure food safety and for quality assurance.

Quality Management System

ADEKA's Quality and Safety Policy guides its sales, manufacturing, R&D and staff departments in their quality and safety initiatives. The company conducts quality and PL inspections*2 to ensure the effective implementation of

initiatives. The results are shared at the Quality Management and Product Liability Council as part of a PDCA cycle.

Reassessment of Quality Inspection Practices

The ADEKA Group conducted a quality control survey in fiscal 2017 which confirmed that no inspections and other work requiring public qualifications were carried out by non-qualified personnel, and that no inspection data was being intentionally manipulated. In fiscal 2018, the Group established procedural standards covering manual processes from test data acquisition to system entry that stand up to the scrutiny of third parties (customers). The Group has conducted quality and product liability audits to verify that its plants are complying with the standards.

Control of Chemical Substances

In accordance with the Strategic Approach to International Chemicals Management (SAICM) to be achieved by 2020, and the SDGs to be achieved by 2030, the ADEKA Group aims to manage and use sustainable chemical substances that are safer for people and the environment. With countries adopting stricter regulations, the Group works to rapidly secure compliance and provide detailed chemical substance information (from raw materials through to product use) so that customers feel safe about using the products.

Food Safety and Hygiene

As a manufacturer of food-grade ingredients, the ADEKA Group implements hygiene management and practices regulatory compliance, while endeavoring to supply safe and secure products. In Japan, the Group is revising product labels in accordance with food labeling standards. In addition, the Group continually improves its quality control from the aspects of both food safety and defense, to prevent internal and external contamination and cross-contamination.

Overview of Quality Management System



Targets and Results for Fiscal 2018 and Targets for Fiscal 2019

Item	Targets for FY2018	Results for FY2018	Targets for FY2019
Full compliance with the Product Liability Act	<ul style="list-style-type: none"> Continue developing country-specific SDS*1 using the automatic SDS creation system Standardize a series of work from the acquisition of test data to the input of test values to the management system and thoroughly manage test values 	<ul style="list-style-type: none"> Continued developing country-specific SDS Established standards and verified the implementation at plants 	<ul style="list-style-type: none"> Continue developing country-specific SDS using the automatic SDS creation system Continue to verify by auditing the management of test values
	<ul style="list-style-type: none"> Operate a system capable of reinforcing the management of product information 	<ul style="list-style-type: none"> Developed a system capable of reinforcing the management of product information 	<ul style="list-style-type: none"> Operate a system capable of reinforcing the management of product information
Management of chemicals	<ul style="list-style-type: none"> Maintain appropriate compliance with domestic and international regulations Survey and address the latest trends in South Korea REACH, the USA (revised TSCA), Thailand(new CSCL) Achieve compliance in countries introducing GHS*4 	<ul style="list-style-type: none"> Finished securing compliance with revisions to the Chemical Substances Control Law (CSCL), and maintained compliance with the U.S. TSCA*5 and South Korea REACH*6 Implemented a survey of trends for Thailand's new CSCL Finished securing compliance with GHS (enacted in Canada in June 2018 and in Mexico in October 2018) 	<ul style="list-style-type: none"> Maintain appropriate compliance with domestic and international regulations Continue complying with South Korea REACH and U.S. TSCA (revised) Survey trends in other laws and regulations in and outside of Japan and secure compliance
	<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 	<ul style="list-style-type: none"> Provided customers with reliable product information based on product standard documentation Continued to gather information and secure compliance 	<ul style="list-style-type: none"> Provided customers with reliable product information based on product standard documentation Secure compliance with food labeling standards (grace period until March 2020)

*1. Quality safety: ADEKA's original approach that integrates quality assurance and product safety. *2 An initiative unique to ADEKA to check for the thorough deployment of quality and safety measures. *3 Safety Data Sheets containing information such as the name of the chemical substance, its properties, hazards and necessary handling precautions. *4 Globally Harmonized System of Classification and Labeling of Chemicals. *5 Toxic Substances Control Act. *6 The Act on Registration and Evaluation of Chemicals of South Korea.

Communication with Customers

The ADEKA Group strives to develop new products that address underlying needs and social issues, by pursuing dialogue with customers. Sales personnel team up with technical service staff to directly talk with customers so that they can identify their needs and issues. This information is shared across the company and studied. As a manufacturer of materials, the Group actively strives to increase value for customers by proposing comprehensive solutions through compounding and formulations that include third-party products.

Safety Quartet

Japan's First Safety Awareness Campaign: "Dedicated to Safety"

In 1912, Furukawa Gomei Kaisha (now Furukawa Co., Ltd.), then the parent company of ADEKA, pioneered the first safety awareness campaign in Japan, for employees of the Ashio copper mine.

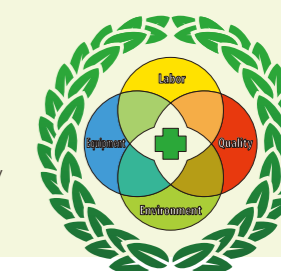
The campaign was inspired by the "Safety First" slogan used by American industry. The concept was brought to Japan by Masayuki Odagawa, head of the Ashio copper mine, who visited the U.S. to investigate new copper mining and refining technology. The company erected signboards with the slogan "Dedicated to Safety" in and outside the worksite, and handed out information sheets to employees to raise awareness. This initiative is considered to be the first voluntary safety awareness campaign to be implemented by Japanese industry.



ADEKA's Safety Quartet

ADEKA is carrying on its founding DNA of placing the highest priority on safety, by combining international and American standards with Japanese management practices. Through experience, ADEKA has found that safety initiatives that organically integrate the four areas of labor, environment, quality, and equipment are most effective, rather than implementing initiatives that target only one area.

In 2003, Noriyuki Kubo, general manager of the Environment and Safety Division, articulated this concept as the Safety Quartet. ADEKA continues to practice this proprietary approach today.



With Business Partners

The ADEKA Group pursues coexistence and co-prosperity by building and maintaining just and fair relationships with its partners, recognizing that contributing to affluent lifestyles through products is what customers value and a shared purpose across the entire supply chain, including business partners.

Sustainable Procurement

Socially Responsible Procurement

Under its Procurement Management Standards, ADEKA conducts procurement activities based on trust and cooperation with its partners. The Company is working to revise the Procurement Management Standards as well as to formulate and release the Basic Purchasing Policy and Purchasing Guidelines to further stabilize procurement and establish a sustainable supply chain based on CSR.

ADEKA is in the process of developing a system for managing its OEM suppliers, which will launch in fiscal 2019.

Initiatives for Developing a Global Logistics System

The ADEKA Group is advancing various initiatives to optimize its global procurement, including a global management system (GMS) that enables Group companies to globally share procurement data. Procurement staff around the globe work together to optimize the Group procurement by centralizing the procurement of common raw materials and sharing

supplier data. The Group is also strengthening its cooperation with overseas subsidiaries by sending procurement personnel from the chemicals business to train and instruct local procurement staff and increase interaction between personnel.

To ensure the stable and continuous supply of its products, the Group is optimizing its inventory management and asks suppliers to maintain inventories of raw materials that are used for the Group's products. ADEKA also cooperates with local Group companies to prepare business continuity plans (BCPs) for the overseas procurement of raw materials, and sources raw materials from multiple suppliers.

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.

● Targets and Results for Fiscal 2018 and Targets for Fiscal 2019

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

Item	Targets for FY2018	Results for FY2018	Self-evaluation	Targets for FY2019
Strengthen supplier management	<ul style="list-style-type: none"> Develop the Basic Purchasing Policy/ Guidelines 	<ul style="list-style-type: none"> Basic Purchasing Policy and Purchasing Guidelines to be decided and disclosed in fiscal 2019 Continued to diversify suppliers 	○	<ul style="list-style-type: none"> Develop OEM supplier management system (scoring of suppliers to visualize risk factors)
Strengthen global procurement system	<ul style="list-style-type: none"> Develop a centralized data sharing system for purchase data (utilization of GMS) 	<ul style="list-style-type: none"> Centralized global procurement data, shared themes with overseas Group companies⇒Sought to optimize Group procurement BCPs for overseas procurement of raw materials (diversification of suppliers) ⇒Cooperated with local Group companies 	○	<ul style="list-style-type: none"> Increase global procurement and expand to encompass other items
Sustainable palm oil procurement	<ul style="list-style-type: none"> Obtained RSPO supply chain certification 	<ul style="list-style-type: none"> Acquired RSPO supply chain certification in April 2018, newly encompassing Kashima Plant and ADEKA FOODS (ASIA) SDN. BHD. 	○	<ul style="list-style-type: none"> Plan to influence supply channels through regular visits to palm plantations and palm oil mills

*Roundtable on Sustainable Palm Oil: Established with the objective of promoting the growth and use of sustainable palm oil products.

Eliminating Conflict Minerals

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

Sustainable Procurement of Palm Oil

In April 2018, the ADEKA Group acquired Roundtable of Sustainable Palm Oil (RSPO) supply chain certification, newly encompassing the Akashi Plant and ADEKA FOODS (ASIA)SDN. BHD.

The Group will continue working to influence supply chains through regular visits to palm plantations and palm oil mills, in order to practice sustainable palm oil procurement.

Eco-Friendly Logistics

The ADEKA Group is shifting to more eco-friendly modes of transport, such as reducing truck transport in favor of container-based ocean transport to ship products from plants to regional distribution centers.

Sustainability Ratings

ADEKA was awarded a Silver Medal by EcoVadis, which assesses supply chain CSR performance. The EcoVadis platform serves more than 50,000 companies covering 190 categories and 150 countries. The EcoVadis assessment for ethical and fair business practices placed the Company among the top 14% of chemicals manufacturers assessed.



Cooperation with business partners

Safety Conference for Logistics Companies

To ensure that the ADEKA Group logistics system is capable of securely and safely delivering products to customers, the Group holds several safety conferences every year, bringing together ADEKA Logistics Corp. and all logistics partners.

Safety conferences study accident reports and the root causes and discuss the validity and effectiveness of measures. At the safety conference for tank truck transport, efforts are being made to improve the emergency response capabilities of drivers by providing leakage accident drills.

Forging Stronger Partnerships

The ADEKA Group will evolve in step with its distributors who deliver products to customers. Placing top priority on customers, the Group promotes initiatives that transcend corporate boundaries, such as regular meetings for dealers to brief them on the Group's business policies and plans. Also, the ADEKA Group organizes intensive seminars for new employees of ADEKA and its distributors in the chemicals and food businesses, providing negotiation skills training and knowledge on products and technologies.

These initiatives are being implemented both in and outside of Japan. In China, ADEKA FOODS (CHANGSHU) CO., LTD. organized the 11th meeting of RISU BRAND distributors, which was attended by 34 persons representing 28 leading distributors.



Meeting of RISU BRAND distributors

With Employees

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.

Promoting a Work-Life Balance

The ADEKA Group emphasizes the importance of a work-life balance, which encourages each employee to demonstrate their capabilities fully. Also, it is introducing a system to support flexible and diverse working styles and foster awareness.

Maintaining a Balance Between Work with Childcare or Nursing Care

ADEKA has introduced programs to support employees in balancing their work with childcare or nursing care. In fiscal 2018, 10 employees took advantage of a program that prepares employees who are on childcare leave for their return to the workplace. ADEKA also offers skills enhancement

training that employees can take while on childcare leave. These provisions help to ensure that employees who take childcare leave are not impacted through negative evaluations or overlooked for career advancement opportunities.

In fiscal 2018, 20 employees including 13 women and seven men took childcare leave, while four employees took nursing care leave. For the second fiscal year in a row, 100% of employees returned to the workplace after their childcare leave and remained working through the end of the fiscal year. Twenty-seven employees elected to take shortened work hours after returning from childcare leave, while 55 employees took advantage of childcare nursing leave.

● Targets and Results for Fiscal 2018 and Targets for Fiscal 2019 (Employees)

Item	Mid-term target	Ultimate target	Targets for FY2018	Results for FY2018	Targets for FY2019
Work-life balance	Support plan for nurturing the next generation (April 2018-March 2021)	Aim for more than five eligible male employees and over 80% of eligible female employees to utilize childcare leave during the fiscal year	Target utilization of childcare leave: more than 2 male employees and more than 80% utilization rate for female employees	Fiscal 2018: Seven male employees and 100% of female employees utilized childcare leave	Continue to aim for more than five male employees and over 80% of female employees to utilize childcare leave during the fiscal year
			Continue initiative to reduce overtime working hours	Continued to implement initiatives to reduce overtime working hours. As a result, the average overtime working hours per month decreased from 16.0 hours in fiscal 2017 to 15.1 hours in fiscal 2018.	Continue implementing initiatives to reduce overtime working hours
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 in FY2018: 2.9%	Continue to aim for women in at least five percent of management positions by 2021

● Targets and Results for Fiscal 2018 and Targets for Fiscal 2019 (Occupational Health and Safety)

Item	Targets for FY2018	Results for FY2018	Targets for FY2019
Workplace safety and security reinforcement	<ul style="list-style-type: none"> Eliminate unsafe activities (inadvertent actions and shortcuts) and unsafe conditions Firmly implement measures to prevent recurrence of problems and promote horizontal implementation within each office and between offices 	<ul style="list-style-type: none"> Environmental & Safety Division conducted audits of safety initiatives and visited facilities (production facilities in Japan, research centers, Group company offices in Japan) 	<ul style="list-style-type: none"> Eliminate unsafe activities (inadvertent actions and shortcuts) and unsafe conditions Eliminate safety risks by implementing facility/equipment improvements Prevent health problems
	<ul style="list-style-type: none"> Repeatedly drill young employees and transferees and continue "know-why" training 	<ul style="list-style-type: none"> Prepared safety videos (forklifts, container deformation due to depressurization) 	<ul style="list-style-type: none"> Continue implementing repetitive training and know-why training
	<ul style="list-style-type: none"> Support activities for Safety Quartet at bases in Japan and overseas and conduct safety audits 	<ul style="list-style-type: none"> Audited three overseas Group company locations 	<ul style="list-style-type: none"> Support activities for Safety Quartet at bases in Japan and overseas and conduct safety audits

Optimizing Working Hours

ADEKA fosters a corporate culture that values the health and vitality of its employees and implements various initiatives to reduce overtime hours. This includes designation of "no overtime" day once a week and individual consultation provided by the labor-management committee.

Promoting Diversity

Active Roles of Women in the Workplace

ADEKA promotes women in the workplace and has formulated an action plan with the aim of having women occupy at least five percent of management positions by 2021. In terms of hiring, the Company conducted seminars for female university students in science programs, which gave students the opportunity to interact with ADEKA's female researchers. Twenty-three out of the 100 new employees that joined ADEKA in April 2019 were women.



Seminar for female university students

Reminded of the Importance of Childcare Leave

On average, just 6.16% of male employees in Japan take childcare leave. However, I was able to take one week of childcare leave for the birth of my second child, with the understanding and cooperation of my workplace colleagues.

During my leave, I took care of our daughter at home right up until my wife was discharged from the hospital. After she came home, we split the duties of looking after the baby. The leave gave me the opportunity to spend valuable time with my daughter as well as our new baby. The experience reinforced the importance of sharing parenting duties, which is important for me to remember when my wife goes back to her job.

I am grateful to my colleagues for their support and will work hard at parenting and in my job.



Yu Yamaguchi

Regulatory Science Promotion Office, Life Science Materials Laboratory

Cultivating Human Resources

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

Global Human Resources Training

In fiscal 2018, the ADEKA Group conducted its global human resources training for 21 young personnel and managers working in positions involving international operations, as part of its efforts to develop global human resources and future leaders. In total, 67 employees have completed the program to date. The program encompasses training in marketing, financial accounting, and labor management, as well as language tutoring to improve language skills.

Seminar for Spouses on Living Overseas

ADEKA held a seminar for 18 spouses and children of employees who participated in the global human resources training. The seminar was aimed at easing the concerns of spouses about living overseas and featured a presentation on preparing to live abroad as well as a roundtable discussion with other spouses who had lived abroad. The seminar was well received and the participants commented that it answered their questions about company provisions and support while abroad. Others appreciated hearing directly from spouses who had lived overseas and said that it eased their concerns about being assigned to another country.

ADEKA will continue working to ensure the safety and security of its employees who work abroad.



Seminar for Spouses on Living Overseas

Training Personnel from Overseas Group Companies in Japan

As part of its Group-wide efforts to develop global human resources, the ADEKA Group accepts personnel from overseas Group companies to work

in Japan for up to one year. In fiscal 2019, ADEKA's Polymer Additives Division will receive personnel from ADEKA (CHINA) CO., LTD. for a period of six months.

Language Learning

ADEKA provides language classes at its offices in Japan conducted by native-speaking instructors. A total of 147 employees attended the classes in fiscal 2018. The Company also subsidizes employees who opt to take lessons at an outside language school and provides language training for employees who will be going abroad on overseas assignments.

International Study Program

ADEKA offers a six-month international study program to develop essential language and cross-cultural skills and learn about local business practices. The program is mainly aimed at younger employees and is held in the U.S., China, Singapore, and Canada. Four employees studied abroad in fiscal 2018, bringing the total number of persons who completed the program to 40 people.

Gaining Cross-Cultural Insights and Reconsidering My Own Values

Under the international study program, I attended a local language school to improve my language skills and received training at a Group company, where I learned about their development and production environments and work processes. I got to know the local staff, and living abroad for half a year gave me insight into their lifestyles and culture, which was a good opportunity to reconsider my own values.

Going forward, I intend to actively take on international work and increase my language skills so that I can contribute to ADEKA's global business development.



Michio Endo
Department I
Food Development
Laboratory

Mentoring System

ADEKA operates a one-on-one mentoring system in which new employees are assigned a personal mentor who provides ongoing support and guidance. The program accelerates the development of new employees and fosters the abilities of mid-career employees to provide guidance and develop staff.

Business School Program

The program gives young employees and mid-career employees the opportunity to attend an outside business school and study marketing, leadership theory, and other subjects. The aim of the program is to give employees the tools (methods and approaches) to achieve goals in various situations and roles.

Improving the Work Environment

New Personnel System

In April 2019, ADEKA revised its personnel provisions with the aim of fostering a corporate culture that seeks out challenges and preparing an environment that is conducive to value creation and the development of global human resources. The changes bring the provisions more in line with contemporary conditions and include a shift from compensation based on job functions to work-centered (role-centered) compensation. The tools used in goal-setting and performance-evaluation interviews with supervisors were also revised to be based on the type of position and role.

Labor-Management Relations

The ADEKA Group views labor unions as important stakeholders and strives for positive labor-management relations built upon mutual understanding and trust. Labor-management meetings are conducted with the basic objectives of contributing to the company's growth while maintaining and improving labor conditions. These matters are discussed by labor and management on an equal footing.

The labor-management council and labor-management committee regularly meet to develop a common understanding of management issues and workplace conditions and make changes to the personnel provisions and re-hiring provisions. Wages, bonuses, and labor conditions for union members are decided every year through collective bargaining.

Human Resources Data

Item	FY2016		FY2017		FY2018	
Number of consolidated employees	3,375		3,551		5,154	
Number of nonconsolidated employees	Male	1,373	1,415		1,459	
	Female	220	224		243	
Employee average age	38.8 Years	Male 39.0 Years	38.8 Years	Male 39.0 Years	38.5 Years	Male 38.7 Years
		Female 37.5 Years		Female 37.6 Years		Female 37.5 Years
Employee turnover rate	2.5%	Male 2.6%	2.8%	Male 2.7%	3.0%	Male 2.9%
		Female 2.2%		Female 3.4%		Female 3.3%
Ratio of female employees	13.8%		13.7%		14.3%	
Ratio of female managers	2.9%		2.4%		2.9%	
Rate of employment of people with disabilities	2.04%		1.89%		1.80%	
Rate of employment of retiree	100%		67%		75%	
Number of employees taking childcare/nursing care leave	Male	1	Male	5	Male 7	
	Female	11	Female	4	Female 13	
Percentage returning to workplace after childcare leave	Male	100%	Male	100%	Male 100%	
	Female	100%	Female	100%	Female 100%	
Job retention rate after childcare leave	Male	100%	Male	100%	Male 100%	
	Female	100%	Female	100%	Female 100%	
Number of employees working shortened hours	Male	0	Male	1	Male 0	
	Female	28	Female	25	Female 27	
Percentage taking annual paid leave	63.7%		65.3%		69.2%	
Number of new graduates hired	74	Male 58	75	Male 62	91	Male 73
		Female 16		Female 13		Female 18
Average length of employment	15.7 Years	Male 15.9 Years	15.7 Years	Male 15.9 Years	15.5 Years	Male 15.7 Years
		Female 14.5 Years		Female 14.6 Years		Female 14.3 Years
Average hours of annual training/education per employee	171.5 Min		141.1 Min		115.0 Min	
Percentage taking refreshment leave	90%		82%		85%	
Percentage receiving health check-up	99.9%		100%		100%	
Repeat health check-up rate	100%		99.9%		79.3%	

Main Labor-Management Meetings

Labor-Management Council: 12 times per year
 Management Council: Twice per year
 ADEKA Group Labor-Management Conference: Annual
 Management Conference: Annual

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.

Safety Achievements and Issues for Fiscal 2018

In fiscal 2018, the ADEKA Group recorded 18 work accidents, including those that required work absences and those that did not. The number decreased by three accidents from fiscal 2017. Both ADEKA and Group companies in Japan recorded fewer accidents, while overseas Group companies recorded an increase in accidents requiring work absences.

● Number of Accidents by Year

FY	2014	2015	2016	2017	2018
Accidents with lost workdays	8(3)	8(6)	9(4)	11(3)	12(2)
Accidents without lost workdays	13(9)	8(5)	5(4)	10(9)	6(5)

Figures in parentheses indicate data for ADEKA and domestic Group companies. Scope: ADEKA and subcontractors and the ADEKA Group's 13 production sites

Initiatives to Prevent Workplace Accidents and Injuries

At each ADEKA plant, occupational health and safety activities are audited by the president and the Environmental and Safety Division in the first and second half of the year, respectively. The necessary action plans are then formulated for the issues identified and implemented through the PDCA cycle of the management system.

Accidents that required work absences were investigated by visiting the site and instituting corrective measures or providing necessary guidance. Additionally, audits were conducted at three overseas Group companies in fiscal 2018. As a preventative measure, overseas Group companies conduct regular audits every few years.

To prevent accidents resulting from the lack of experience of young employees and newly transferred workers, ADEKA created a new basic safe practices manual and distributed it to all Group locations. Furthermore, all new employees in the R&D, technical and production areas are required to participate in training at the safety experience training facility set up in the Urawa R&D Laboratory. A total of 85 employees have taken part in the training.

Promoting Mental Health

ADEKA implements initiatives to prevent mental health issues as part of its overall efforts to promote the health and well-being of employees. In June 2018, ADEKA implemented stress tests for all employees. The test results were analyzed to study measures for improving the workplace conditions at business locations needing improvement. The Group also conducted mental health education for 235 managers of ADEKA and Group companies to educate managers about their role in supporting mental health.

Occupational Safety and Health Initiatives While Abroad

The ADEKA Group is working to enhance occupational safety and health while abroad, as more and more employees are sent abroad to work at Group locations outside of Japan. In addition to annual health checkups, employees who are on long-term assignments outside of Japan also receive an interview with an industrial physician either by phone or in person when they temporarily return to Japan.

The Group contracts with a corporate medical support service that provides 24/7 access to physicians for consultations and emergency medical assistance, in case medical care is needed while employees are staying in a foreign country. Personnel who are about to be sent abroad and their accompanying family attend workshops that cover medical issues and mental health while living abroad.

Regular Health Check-Ups

ADEKA employees receive regular health check-ups twice a year, as well as special check-ups that include examinations and tests stipulated in the Industrial Safety and Health Act.

ADEKA maintained a 100% rate of employees receiving regular health check-ups in fiscal 2018. If an employee is found to have a medical issue, they are retested and see an industrial physician or public health nurse from the Head Office clinic as necessary. These initiatives reflect a concerted effort by ADEKA to enhance its health management for employees.

ADEKA cooperates with the ADEKA health insurance association to arrange for industrial physicians to give annual seminars on specified health check-ups. ADEKA is also establishing a framework to enable the dependents of employees to receive specified health check-ups at its business locations, and it is working to increase the rate of persons receiving specified health check-ups.

With Shareholders and Investors

Placing high priority on communication with shareholders and investors, who expect continued growth and profitability, the ADEKA Group strives to disclose corporate information in a timely and appropriate manner and maximize corporate value through business activities.

Dialogue with Shareholders and Investors

Proper Disclosure of Information

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

However, it will disclose information should it determine that the content of its financial results could significantly impact shareholders and investors.

Information Disclosure through Website

ADEKA strives to practice timely and appropriate information disclosure to all stakeholders through its website. In fiscal 2018, ADEKA began streaming the president's presentation at the earnings briefing sessions to reach a wider audience with its information disclosure.

Returning Profits to Shareholders

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 priority on strengthening its management base and investing in growth businesses from a mid- to long-term perspective.

IR Activities

ADEKA actively conducts IR activities such as briefings and issuing materials on its financial results for institutional investors and analysts. In fiscal 2018, ADEKA held briefing sessions for the first-half and full-year earnings, and conducted its 98th investor relations meeting. ADEKA actively discloses important management-related information such as business plans so that stakeholders can better understand the Company. Feedback and requests collected through

investor dialogue are reviewed by management and used to implement improvements and maximize corporate value.

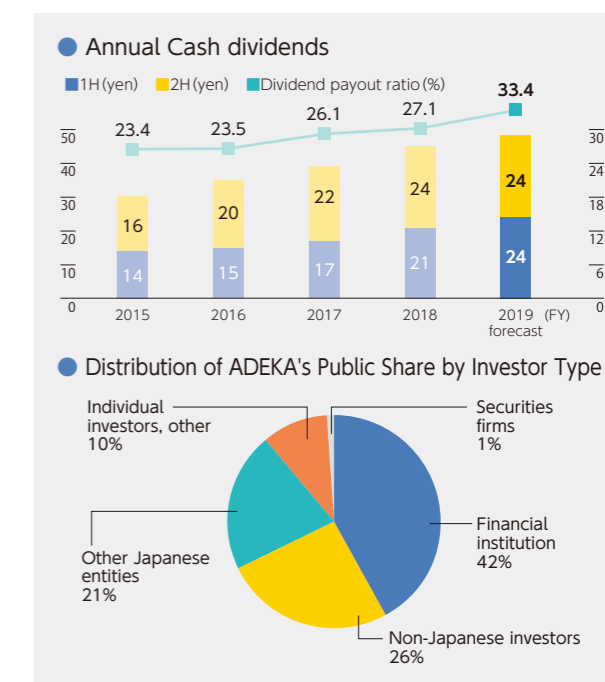
General Shareholders Meeting

We put great effort into maintaining an environment in which all our shareholders can properly exercise their rights. This includes early disclosure on the company's website and avoidance of holding our shareholder meeting on the same day as many other Japanese companies hold theirs, which facilitates productive dialogue with shareholders.

To make easier the review of the agenda by overseas shareholders, we posted an English notice of invitation to the shareholders meeting to be held in June 2018.



The 157th Ordinary General Shareholders Meeting



With Local Society

The ADEKA Group strives to be a good corporate citizen that respects and understands the culture and customs of the communities it does business in, both in and outside of Japan.

The Group continues to engage in active dialogue with communities, seeking to co-prosper and coexist with society.

Activities for Local Communities

In an effort to build positive community relations, ADEKA Group companies are actively involved in community events and seek out opportunities for diverse public interaction, such as organizing community festivals for the public. Group companies are also actively involved in cleaning up surrounding neighborhoods.

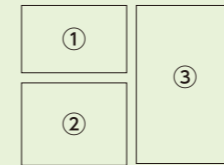


- ① ADEKA booth organized by the Kashima Plant as part of a consumer fair
- ② Gift of Christmas cakes to a local foster home from the Akashi Plant
- ③ Community summer festival organized by the Fuji Plant
- ④ A volunteer of ADEKA AL OTAIBA MIDDLE EAST LLC cleans up the neighborhood
- ⑤ Employees of ADEKA FOODS (ASIA) SDN.BHD. take part in a meeting to discuss industry-government-academia collaboration with the University Putra Malaysia
- ⑥ Employees of the Kashima plant pick up trash in the surrounding community



Fostering the Next Generation

ADEKA Group companies are helping to shape the career perspectives of the next generation, by welcoming student groups who wish to visit production facilities and actively accepting student interns.

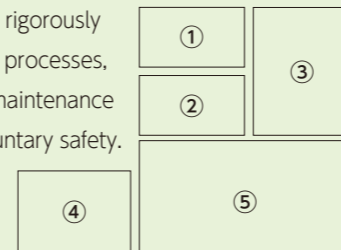


- ① Local high school students visit the Mie Plant
- ② University students serving internships at Amfine Chemical Corporation
- ③ Students from the Shizuoka Prefectural High School of Science and Technology visit the facilities of ADEKA (SINGAPORE) PTE.LTD. as part of an overseas training program



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.



- ① Employees of the Akashi Plant check measures to prevent wastewater leakage
- ② Occupational safety training at ADEKA AL OTAIBA MIDDLE EAST LLC led by an external instructor
- ③ Training drill at ADEKA FOODS (CHANGSHU) CO., LTD. to respond to an ammonia leak
- ④ Joint fire drill at the Mie Plant with the cooperation of the Kuwana City Fire Department
- ⑤ Emergency response drill for phosphoric acid tank leakage at ADEKA FINE CHEMICAL (SHANGHAI) CO., LTD.



Governance

The ADEKA Group, under its management policies of “Contributing to society through our business” and “Realizing harmony and co-prosperity with society,” strives to meet public expectations and demand. At the same time ADEKA Group is consistently enhancing its brand and corporate value by reinforcing its corporate governance and rigorously managing compliance.

Corporate Governance

Basic Stance on Corporate Governance

The ADEKA Group places a top priority on the strengthening of corporate governance in order to realize its mission and management policies as well as achieve sustainable growth and enhance its mid- to long-term corporate value. Based on the audit and supervisory board system adopted under its management system, the company is strengthening its governance systems through efforts such as the appointment of independent external directors, introduction of the executive officer system and establishment of Management Committee.

Strengthening Corporate Governance

In accordance with the ADEKA Group Corporate Governance Guidelines, the ADEKA Group is

constructing a highly effective system of corporate governance that 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.

Internal Control System

ADEKA has established an internal control system that allows management to properly manage company operations and assets. The Internal Control Promotion Committee is in charge of developing, operating and overseeing the internal control system based on the Companies Act and adequate financial reporting procedures based on the Financial Instruments and Exchange Act.

Compliance with Corporate Governance Code

The Financial Services Agency and the Tokyo Stock Exchange, Inc. introduced Japan's Corporate Governance Code (CGC), which establishes fundamental principles for effective corporate governance at listed companies. ADEKA operates a CGC Promotion Committee that meets on a quarterly basis to discuss the following matters.

1. Study of measures to strengthen corporate governance
2. Review of the ADEKA Group Corporate Governance Guidelines
3. Matters disclosed in the Corporate Governance Report
4. Review of the implementation status of ADEKA's governance based on the CGC and the Guidelines
5. Review of the latest trends in corporate governance, and based on input from institutional investors

In order to comply with revisions to the CGC that were introduced in June 2018, the ADEKA Group Corporate Governance Guidelines were revised in November 2018.

Assessment of the Effectiveness of the Board of Directors

ADEKA conducts an analysis and assessment of the effectiveness of the board of directors at the end of each fiscal year and discloses a summary of the results. All directors and auditors are asked to complete a self-assessment questionnaire on the level of active discussions and strategic decision making/supervision functions of the board of directors. An assessment/analysis is made at a meeting attended only by the external directors and external audit & supervisory board members (collectively “External Officers”) based on the aggregated results from the questionnaire.

FY2018 Assessment Result

- The board of directors is adequately and efficiently managed.
- Stronger supervision is needed over corporate governance and compliance of Group companies, including those of overseas, to regularly monitor the progress and results of the mid-term management plan and large-scale investment projects and deepen the discussions on issues that need to be addressed.

Incentive Compensation for Directors

ADEKA's incentive compensation for directors is composed of remuneration paid as compensation for performing their duties, bonuses linked to performance

of the company and individuals and “restricted stock compensation” introduced as a medium- to long-term incentive in June 2017.

Providing Information and Support to External Officers

The ADEKA Group continues striving to improve its support system for external officers so that they can deepen their understanding of the Group's business activities and make sound decisions.

Soon after external officers are appointed, the Group holds an orientation session on its businesses and financial position and organizes facility tours. Before the Board of Directors' meetings, reference materials and overviews on important issues are provided by the secretariat to ensure that external officers are fully briefed and can engage in constructive discussion.

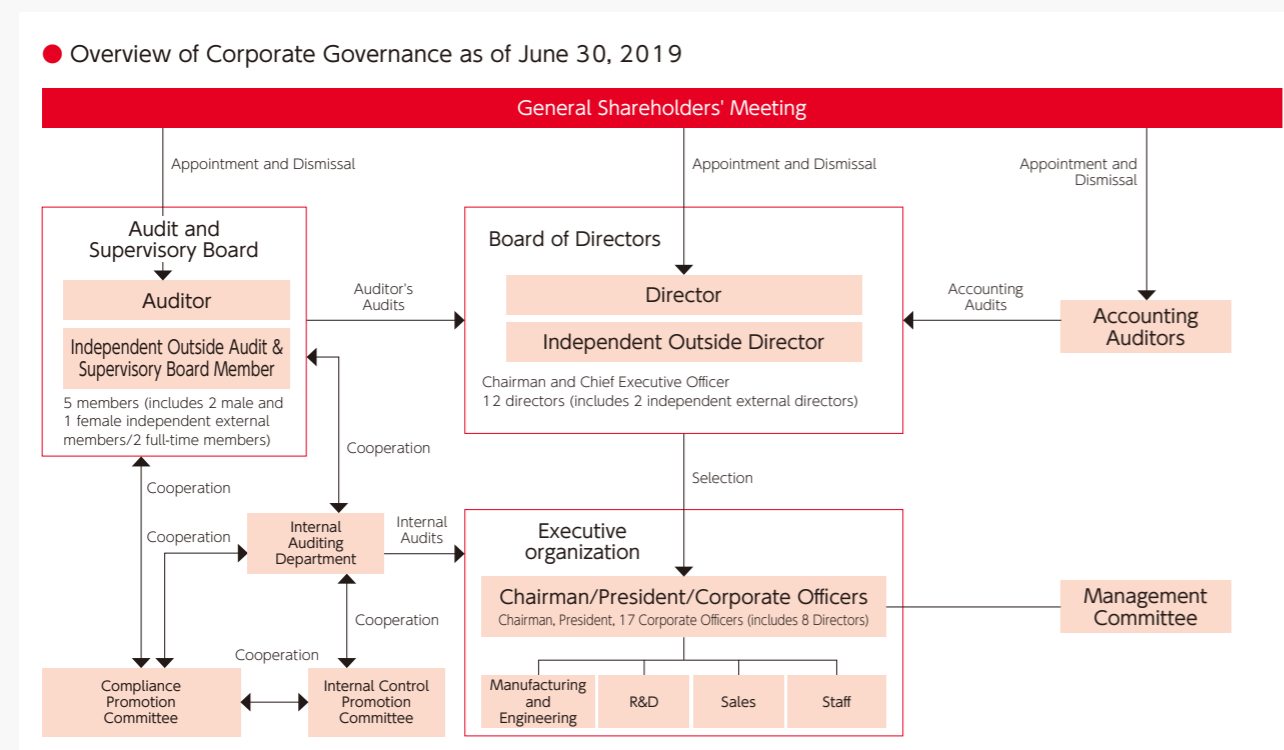
Audit Framework

ADEKA operates under a corporate auditor system, with a five-person Audit and Supervisory Board that includes three independent external auditors. All auditors attend the Board of Directors' meeting, while full-time auditors also attend meetings of the Management Committee. Full-time auditors also attend important meetings in an observer capacity, including meetings of the CGC Promotion Committee, Compliance Promotion Committee, Internal Control Promotion Committee, and Risk Management Committee. This enables the full-time auditors to audit all aspects of the business.

The attendance rate by external auditors at the 17 Board meetings convened in fiscal 2018 was 96%. The attendance rate by external auditors at the six Audit and Supervisory Board meetings convened in fiscal 2018 was 100%.

Respect for Human Rights

The ADEKA Group intends to create a society that respects the rights and diverse values of all stakeholders involved in our business activities. We are making every effort to promote respect for the basic human rights of all stakeholders, including customers, business partners, local communities and employees. In order to eliminate any violations of human rights, such as child and forced labor, in the Group or by the domestic and overseas supply chain.



Compliance

Basic Stance on Compliance

The management policies of the ADEKA Group support the effective response to changes in the social and managerial environment. They are intended to realize sound management and harmony with international society by sufficiently protecting stakeholders' interests. The Group's compliance management is intended to fulfill public expectations and demand through the provision of new value that is useful for addressing 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 quarterly to manage and monitor compliance at ADEKA. A system for instilling the Basic Compliance Policy across the company and swiftly collecting information has been established by appointing Compliance Leaders in each section. In addition, representatives and compliance officers of major Group companies meet twice a year for the Group Compliance Conference. Also, the company conducts a survey on compliance awareness biannually, targeting all executives and employees of major Group companies. Survey results are used to improve activities in a united Group effort to enforce compliance rigorously.

Compliance Education

ADEKA implements compliance education and training for a broad spectrum of employees, using a combination of e-learning courses, job-specific training, education on specific subjects, and education specific to laws and regulations. In fiscal 2018, ADEKA focused on implementing compliance leader training*1 and basic e-learning courses.*2 Additionally, ADEKA conducted lectures on harassment prevention in December 2018, which were attended by 479 employees.

*1. Four-day course taken by 125 employees
 *2. Conducted nine courses and completed by 8,006 employees

Strengthening Group Compliance

In fiscal 2018, the results from the 2017 compliance awareness survey were used to give feedback to the Group

Compliance Council and the representatives and compliance managers of the Group companies through individual interviews. The feedback was reflected in each company's fiscal 2018 compliance plan. ADEKA also conducted compliance leader training programs which encompass the representatives and compliance managers of the Group companies.

Operational Status of System for Reporting Compliance Issues

The ADEKA Group has maintained an internal reporting system since 2003, and it received eight reports in fiscal 2018. Users can provide information anonymously to protect them from the negative repercussions of reporting non-compliance issues. Details about the cases and the actions taken are shared with auditors and outside legal counsel, and reported to the Board of Directors.

Preventing Bribery

The ADEKA Group is committed to combatting bribery through employee training and risk assessment based on its Basic Policy of Prohibiting Bribery, related regulations, and the Anti-Bribery Guidelines.

At the Global Administration Staff Meeting that was held in September 2018, English and Chinese translations of the revised Anti-Bribery Guidelines were distributed to personnel from overseas Group companies, and the companies were urged to strengthen their bribery prevention measures.

Seminar on Anti-Monopoly Act

Toshiaki Tada, an attorney with the Hibiya Sogo Law Offices, was invited to give a seminar on the Anti-Monopoly Act. Tada discussed the purpose and mechanisms of the legislation and described the sanctions and preventative measures against cartels and bid rigging, as well as precautions for implementing business tie-ups with competitors. The seminar was broadcasted to the branch offices through the teleconferencing system, with 185 employees attending the seminar.



Governance

Messages from the External Directors



Kazuyuki Nagai
External Director

Increasing Extraterritorial Application of Foreign Laws in Securing Compliance

The extraterritorial application of foreign laws is increasing. The narrow sense of extraterritorial application includes the direct application and enforcement of the laws of a given country against the actions and trade occurring in another country. In the broad sense, it means that companies that fail to meet the standards of the legal system of the other country are excluded from conducting trade with that country. In the broadest sense, it includes cases in which international standards or the standards of a specific country raise ethical and social issues that in effect restrict the behavior of Japanese corporations, even if there are no legal measures against it.

Broadly speaking, this is a risk management issue having to do with understanding different cultures and cross-cultural corporate ethics. These perspectives are necessary to embrace ESG factors at a deeper level.

As an external director, I will strive to foster such perspectives within the ADEKA Group.



Shigeru Endo
External Director

Focusing on ADEKA's Contributions to Society through Its Business

ADEKA's commitment to contributing to society through its business is the very definition of CSR. This principle has been the focus of my attention, having served as an external director of ADEKA for almost a year. I hope that each employee will embrace this principle and take ownership of it by implementing it in their everyday activities.

The public is increasingly focusing on corporate governance. ADEKA has made a concentrated effort to practice corporate governance and is seeing results. Through its ongoing efforts to be an excellent company, ADEKA and its Group companies are enhancing their governance, which will further increase corporate value.

As an external director, I am always conscious of increasing corporate value and have given much thought to what I can do to increase ADEKA's value over the medium- and long-term future. I will try to use my experience in the international community to help ADEKA take another step forward in its global business development.

Risk Management

Basic Stance on Risk Management

As business risks increase in the management environment, the ADEKA Group has been seeking prevention of the incidents and minimization of the damage thereof. This has been done by outlining a system for managing risks in the ADEKA Group Risk Management Manual focusing on prevention and countermeasure effort.

Crisis Management

The ADEKA Group Risk Management Manual also sets the framework and workflow for enabling 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 within 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

In October 2018, an external lecturer, invited by the Information Management Subcommittee, conducted a seminar on information security to improve employee knowledge and awareness of information security, and 588 employees attended. To strengthen information security, the Information Security Policy and related

regulations were also formulated and have been in effect since May 2018.

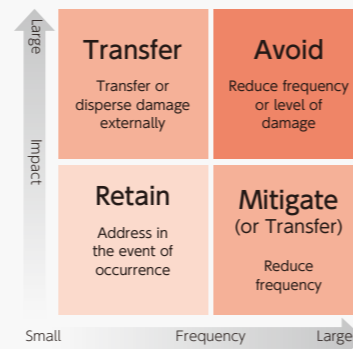
Risk Management System

The risk management framework under regular circumstances is stipulated in the ADEKA Group Risk Management Manual.

The Risk Management Committee, which is chaired by the Director in charge of risk management and consists of managers of the staff departments in the Head Office, meets twice a year to formulate and manage the Basic Risk Management Policy.

Risk assessment surveys are conducted for the general managers of divisions and business locations. Information management, security and business continuity risks are mapped based on the frequency of occurrence and impact, and measures are studied.

● Selection of Countermeasures



Theme Selection Method

A risk matrix is created using the survey, and the area in which the level of damage and impact is higher than 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 the priority issues.

Third Party Opinion: Multifaceted CSR Issues Related to Main Business

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 assumed his current position in 2008 after becoming a lecturer in the Faculty of Economics at Takasaki City University of Economics in 1997, and then an Associate Professor in 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 the Environment), and member of the ESG Financial Workshop (Ministry of the Environment). His publications include ESG Investing—New Form of Capitalism (Nikkei Publishing Inc.) and Responsible Investment—Changing the Future through the Flow of Capital (Iwanami Shoten, Publishers).



Setting Ambitious KPIs

This year, ADEKA started the process of selecting its CSR priority issues, which is a good sign. Designating the priority issues means that the Company has made a decision to prioritize its business resources toward those issues. External stakeholders will also want to know what the priority issues are. I hope that the Company will carefully select the priority issues in areas that have a large impact (both positive and negative) on the environment and society and set ambitious key performance indicators (KPIs) that will be acceptable to the public.

Tackling the Challenges of the 21st Century

Last year, ADEKA acquired Nihon Nohyaku Co., Ltd., which was originally the agrochemical wing of ADEKA, and made it into a Group company. This led to the addition of agrochemicals to ADEKA's business portfolio. Agrochemicals that support stable food production are extremely important to feed a growing global population.

It is also true that agrochemicals continue to be surrounded by controversy. For example, a German researcher found that the biomass of flying insects had declined by 76% over a 27-year period of trapping insects from 1989 to 2016. Insects play a fundamental role in ecosystems as pollinators for plants and as a food source for birds, and their decline is a critical matter. While it isn't known why insects are declining,

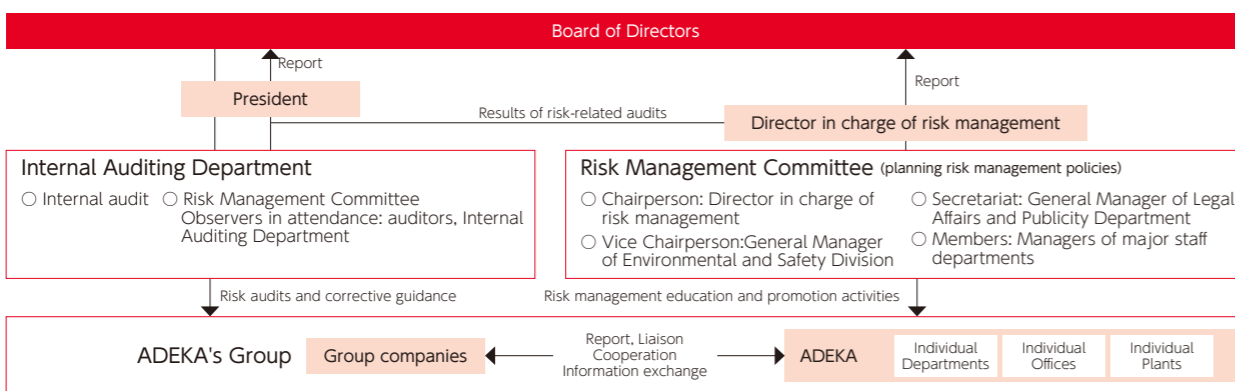
intensive agriculture and agrochemicals are suspected to be the cause. Although honeybees and their hives can be moved by a beekeeper before spraying agrochemicals on fields, we need to be aware that wild bees cannot escape in the same way.

Agrochemicals are undeniably important to modern agriculture, but we can't simply say that agrochemicals are good and help to increase food production as long as we comply with current regulations. Finding the right balance between ensuring a stable food supply and conserving our ecosystems might be the biggest challenge of the 21st century. As a specialist in agrochemicals, ADEKA could significantly increase its corporate value by directly tackling this difficult issue and coming up with a truly evidence-based solution.

Addressing the Plastics Problem

The feature article in this report describes a flame retardant that inhibits the release of toxic gases. This is a good example of a product solving an issue. At the same time, the issues of waste plastics and ocean plastics have been in the spotlight for the past year. One of ADEKA's core businesses is polymer additives. Perhaps the time has come for ADEKA to outline its overall stance on the plastics problem by indicating the impact of the issue on ADEKA's polymer additives business and what ADEKA can do to address the plastics problem.

● Overview of Risk Management



Response to Third Party Opinion

Koji Tajima Director and Managing Operating Officer

I would like to express my gratitude for your valued opinions on the ADEKA Group's CSR initiatives.

We are striving to get each employee to deeply understand and focus on tackling work that helps to address social issues through our products. Your positive assessments of the contributions that are being made by our products will encourage us to further increase our efforts. We understand that our impact on society is increasing every passing day with the growth of our business and our changing business portfolio. We also must fully recognize

that ecosystem changes due to global warming and declining biodiversity are impacting our economic activities and individual lives. The ADEKA Group's business is deeply intertwined with social issues such as global-scale environmental pollution from plastics, food shortages, and food insecurity. The ADEKA Group must actively work to address these issues and will harness its science and technology to meet these challenges and provide solutions.

The ADEKA Group will continue to listen to its diverse stakeholders, while striving to increase corporate value and realize a sustainable society.



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