

# Air Water Group: Value Creation by Weaving

**AIR WATER  
ANNUAL REPORT 2017**  
Year Ended March 31, 2017



## Management Philosophy



We dedicate ourselves and our resources backed by the entrepreneurial spirit and pride in creation and development of businesses linking air, water, the earth, and humans.

Our name embodies our mission: to create and conduct enterprises that effectively use our planet's air, water, and other irreplaceable assets, for the purpose of making a meaningful contribution to our fellow human beings across the globe.

We are making efforts to dynamically develop new businesses by identifying community-based businesses and the roles we should play for people in those communities while enhancing the collective strength of our Group. We have expanded our business domains from industrial gas and chemical-related businesses, which play active roles in various industrial fields, to medical business, energy business, agriculture/food business, logistics business, seawater business, and aerosol-related business, which involve the lives and living of people. Through collaboration between over 240 of our diverse Group companies and the pooling of their various strengths, we will continue to tackle solutions to problems faced by customers and society and rise to the challenge of creating new value.

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## Financial Information Media



Annual Report  
Financial Section



Website of financial and  
investors information

## Forward-looking Statements (Business Risk Factors, etc.)

The forward-looking statements in this Annual Report regarding estimates of business performance and predictions of future developments reflect Management's judgments based on currently available information, but also involve potential risks and uncertainties. Actual business performance could be significantly different from the projections made herein due to changes in various factors.

## Basic Management Policies and Growth Strategies of the Air Water Group

With dynamism and flexibility, the Air Water Group is pioneering a new age by strengthening its business foundations as an industrial gas supplier and pursuing an aggressive M&A strategy to expand its business domains.

### All-Weather Management System

"All Weather Management System" is a management strategy that strives for consistently stable earnings while pursuing an optimal balance of business structure between industry-related businesses (industrial gases and chemicals) and everyday life-related businesses (medical treatment, energy, agriculture and food products, etc.). Rather than relying on a single business to deliver corporate growth through the selection and concentration of management resources, Air Water considers its main business to be the business of expansion. Air Water anticipates the needs of the next generation, strives to diversify its businesses and strengthen its earning power, and establish a business structure which is unaffected by the fluctuations in business conditions.

### Order Rodentia Style of Business

"Order Rodentia Style of Business" is a unique growth strategy for Air Water business divisions and affiliated medium-sized companies including regional companies and companies in the Air Water Group, which imitates characteristics of rodents, that are said to be the most prosperous order of mammals. When an asteroid hit the earth and caused a dramatic change in the environment, dinosaurs were unable to adapt and died out. However, rodents grew larger ears and brains, shrank in size, and became tough and resilient. Air Water achieves sustainable growth by continually cultivating and producing medium-sized companies that—like rodents—are agile enough to adapt to environmental changes and that have the vitality to flexibly develop new fields and new businesses.

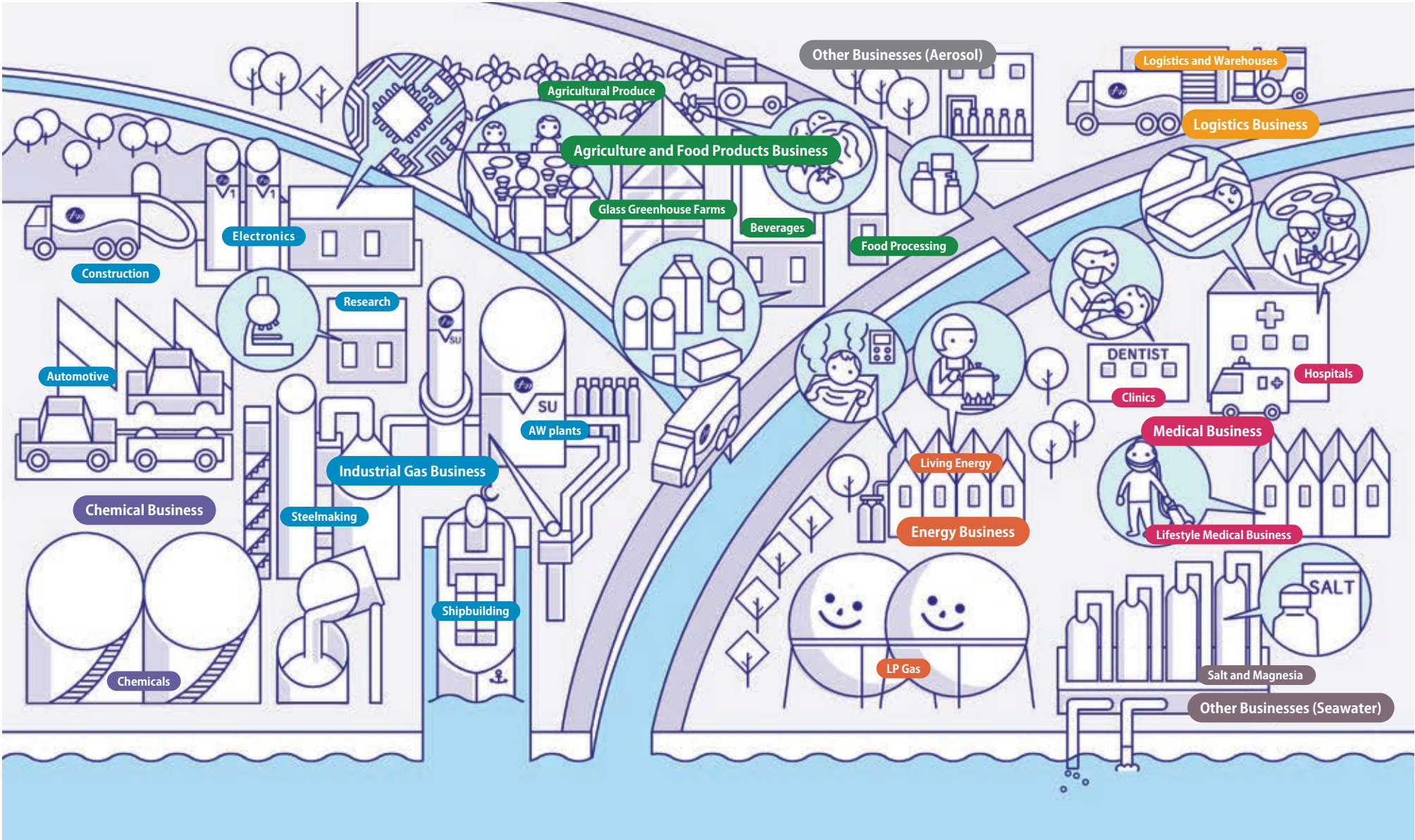
### M&A Strategy

For Air Water, the M&A process is not a process of simple "addition" but rather a process of "multiplication" filled with infinite possibilities. We see M&A as a way of succeeding to the technology, knowhow, and the business contacts and relationships of another company in one fell swoop, in other words, buying the "time" spent and the "human resources" nurtured by that company. Our strategy is to share the Air Water Group's Management Philosophy and Action Guidelines with every target company, while at the same time respecting its independence, with a view to successfully integrating the organizational climate, human resources and technologies of each target company into the Group, capturing synergies and creating new value.

### Regional Strategy

In each of our businesses, starting with our core Industrial Gas Business, we are aggressively expanding our business operations under the leadership of our eight regional business companies located throughout Japan from Hokkaido to Kyushu. Our aim is to become a corporate entity with a presence in every region of Japan. Through collaboration between our regional business companies on the manufacturing and lifestyle frontlines and the companies that coordinate their activities, we are constantly exploring customer needs. Leveraging its diverse portfolio, the Air Water Group will undertake operating activities that only it can do, aiming to build a robust and solid profit base and achieve strong business growth in Japan.





**Industrial Gas Business**

Industrial gases such as oxygen, nitrogen and argon are used according to their respective properties for applications essential to manufacturing and everyday life, and to support the foundation of society. The Air Water Group delivers industrial gases and applications that meet customers' needs through sales bases and a production network covering Japan from Hokkaido to Kyushu.

**Chemical Business**

With the Coal Chemicals business, which refines coke oven gas supplied by steel works and manufactures chemical products, the Fine Chemicals business, which creates high-quality products from organic compounds utilizing synthesis technologies, and Kawasaki Kasei Chemicals Ltd., which specializes in functional chemicals, Air Water can use its abundant knowledge and expertise to meet the diverse needs of its customers.

**Medical Business**

As the top seller of medical gas, Air Water offers comprehensive medical solutions from advanced medical care to everyday, general medical care. The Group has expanded its business domain to include the construction of hospital facilities such as operating rooms, respiratory and other medical equipment, SPD and contract sterilization, home care, and also sanitary materials, hypodermic needles and dental materials.

**Energy Business**

The Energy Business began in Hokkaido in 1955 with the goal of enriching people's lives. Today, Air Water operates the LP Gas and Kerosene businesses under the Hello Gas brand, still with the same goal. The Energy Business is also evolving its business as a comprehensive energy company through a range of businesses that include supplying natural gas (LNG), and

manufacturing and selling LNG tank containers for which demand is predicted to grow.

**Agriculture and Food Products Business**

The Food Products Business, which started with the sales of frozen foods utilizing liquid nitrogen, commenced full-scale participation in the agriculture business in 2009. Since then the Group has delivered safe and secure "food" to customers in the three areas of "Agriculture," which covers everything from production and processing to distribution and sale, "Food Product Solutions," which involves the manufacturing and sale of ham, sausages and sweets, and "Beverages" especially vegetable/fruit beverages.

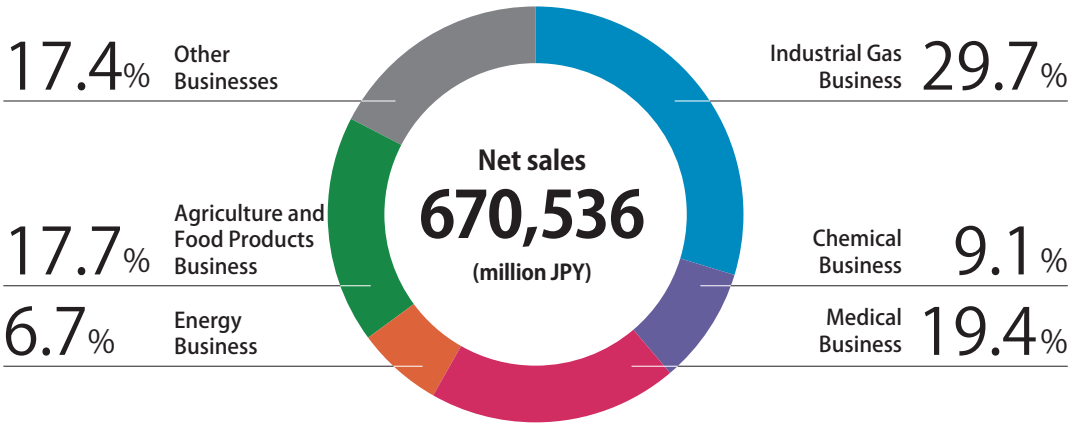
**Logistics Business**

(established as new business segment in FY2017)  
The Logistics Business leverages "low-temperature transportation technology" accumulated in the high-pressure transportation of gases such as oxygen and nitrogen and the transportation of liquefied gas to conduct comprehensive logistics businesses, including the container transport and distribution business with warehouse functions, food logistics for retaining freshness through nuanced temperature control, medical logistics for transporting blood (plasma) and even the manufacturing of vehicles.

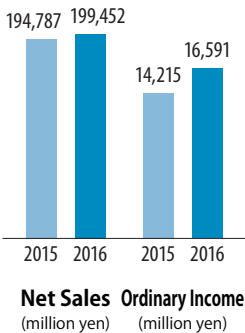
**Other Businesses**

With their unique, distinct products, these businesses underpin the Order Rodentia Style of Business. The Other Businesses segment incorporates a myriad of fields, including the Seawater business, which manufactures salt and magnesium derived from seawater elements, the Aerosol business, which utilizes sophisticated gas technologies, as well as electronic materials, O-rings and NV (metal surface treatment).

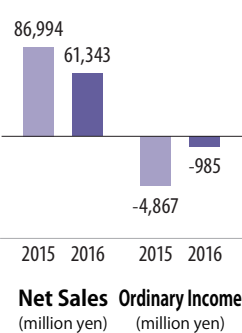
**Sales Breakdown by Business (FY2016 Results)**



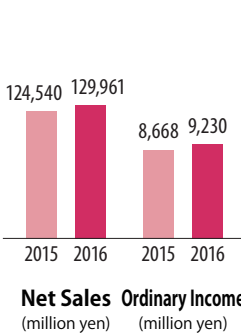
**Industrial Gas Business**



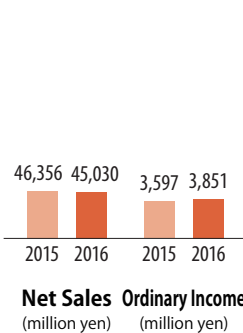
**Chemical Business**



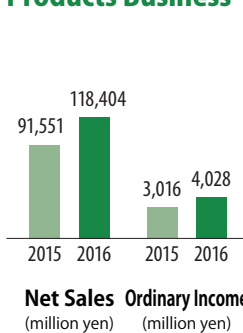
**Medical Business**



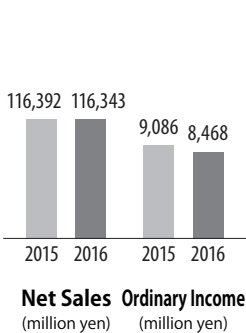
**Energy Business**



**Agriculture and Food Products Business**



**Other Businesses**



\*Based on reporting segments as of the end of FY2016. From FY2017, the Electronic Materials business was transferred from the Industrial Gas Business to the Other Businesses segment, and the Logistics business was transferred from the Other Businesses segment to the newly established Logistics Business segment.



The Air Water Group aims to achieve “continuity and development” by envisioning the post-2020 society and beyond, and continually changing form.

**Q Fiscal 2016 (ended March 2017) was the first year for the NEXT-2020 Ver. 3 Medium-term Management Plan. How would you assess the results?**

**A Our business restructuring measures and M&A-based growth strategies resulted in record high sales and earnings in FY2016.**

The Air Water Group steadily implemented growth strategies in its businesses in accordance with the NEXT-2020 Ver. 3 management plan (FY2016-FY2018), the third step in our long-term growth vision set in 2010 of becoming a one-trillion yen company by FY2020. The basic concept for this plan is further efforts for structural reform and sustainable growth. During FY2016, the initial year of the plan, we achieved steady growth in the Industrial Gas Business amid firm demand from Japanese industries, as well as the Agriculture and Food Products Business through a proactive M&A program. We also implemented structural reforms to strengthen the Medical Business and Energy Business, resulting in higher results from the previous fiscal year. The Chemical Business continues to face difficulties due to market fluctuations, but we have begun to see signs of improvement in business conditions.

As a result, net sales in FY2016 amounted to ¥670,536 million (+1.5%) from the previous fiscal year, with operating income of ¥41,341 million (+4.6%), ordinary income of ¥41,251 million (+17.6%), and profit attributable to owners of parent of ¥22,337 million (+10.9%). We feel these results

have put us firmly on a growth track to achieve the targets in the NEXT-2020 Ver. 3 plan. For FY2017, we are forecasting net sales of ¥760 billion, with operating income of ¥44 billion, ordinary income of ¥44 billion, and profit attributable to owners of parent of ¥24 billion.

- For an overview of the “Vision of Becoming a One-trillion Yen Company by FY2020,” see “Transition of Medium-term Management Plan ‘NEXT-2020’ and Overview of ‘NEXT-2020 Ver. 3’” (P11-12).
- For a summary of FY2016 results see “Financial Data (10 Years)” (P37-38), and for results by segment see the summary of business results (P17-30).

**Q What were the circumstances surrounding the structural reforms and reshuffling of executives, including the president, conducted in April 2017?**

**A We implemented a series of structural reforms under the Management Reform 2017 program, based on the Air Water Group’s expanded business scope and future growth strategies, and aimed at rejuvenating our structure while maintaining business continuity.**

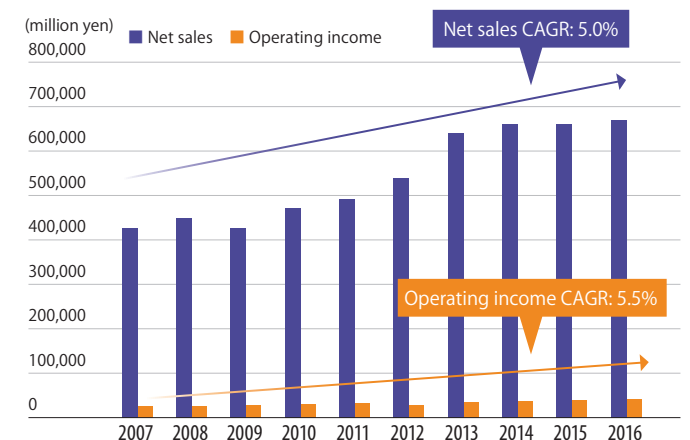
In the post-bubble years, the “lost two decades” that began in the 1990s, the Japanese economy experienced an extended period of slow growth. During this time the Air Water Group pursued a growth strategy built on M&A, and significantly expanded its business scale. Looking back over that last ten years (FY2007-FY2016), when our M&A program was particularly active, the Air Water Group’s sales and earnings rose 1.6 times, a compound annual growth rate (CAGR) of 5.0% for sales, and 5.5% for operating income. Along with this expansion in business scale, we also steadily built a foundation to take advantage of future synergies in our business fields, and have reached a stage where we feel that we are making real progress toward achieving our vision of becoming a one-trillion yen company by FY2020.

However, in terms of performance over the last two years, a couple of issues have become apparent. Growth in

the Industrial Gas Business and other existing business, due in part to low oil prices, has fallen short of the NEXT-2020 Ver. 3 management plan. We could also be making better use of the collective strength of the corporate group utilizing our diverse business foundation.

Considering these management issues, changes in the business environment for the Air Water Group, and the challenge of sustained growth through fiscal 2020 and beyond, we concluded the time was right to transform our organizational structure and corporate culture, and decided to bolster our growth strategies through reforms to the existing management structure.

**Consolidated Results over the Past 10 Years**  
Expanded business scale built on M&A over the past 10 years



**Q What are the main points of the management restructuring to achieve genuine reform, including the corporate culture?**

**A We are accelerating efforts to lay the foundation for post-2020, envisioning the society beyond, and working to continually change our form.**

I believe that FY2017 will be a major turning point in terms of laying the foundation for post-2020. This is because we recognize the importance of looking ahead to post-2020 and the society beyond, creating a vision for the future, and continually changing our form to achieve it.

**Masahiro Toyoda**  
Chairman and CEO  
Air Water Inc.

## CEO Message (cont.)

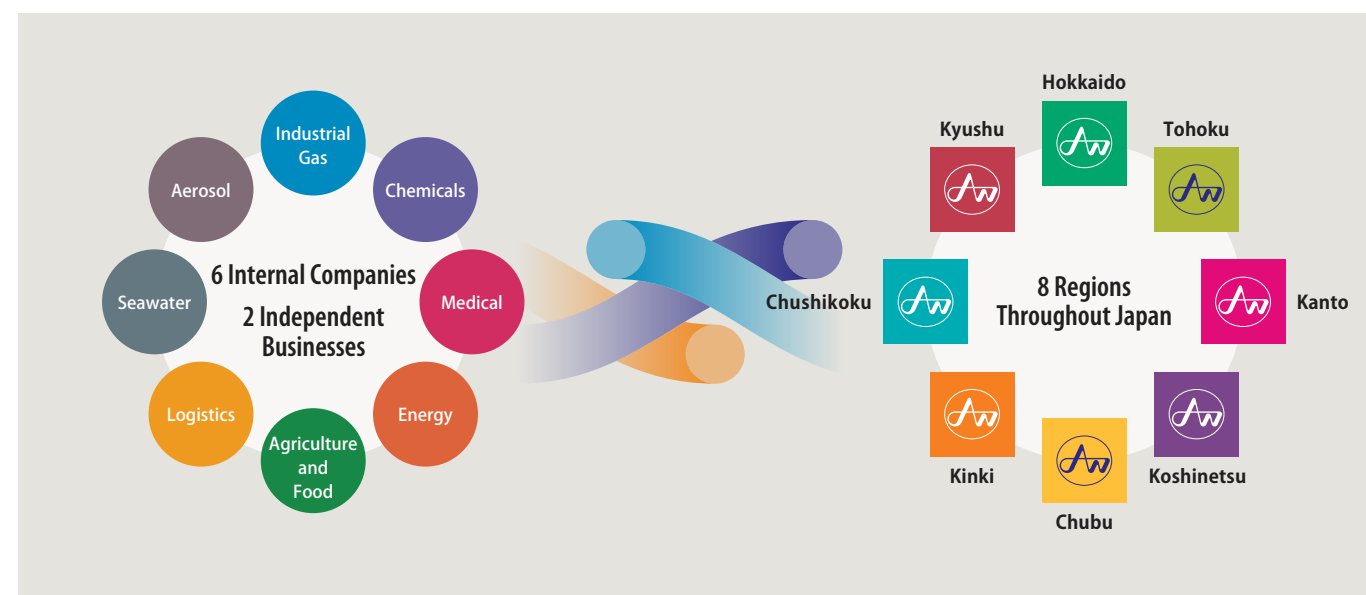
In the recent reforms to the management structure, we made sweeping changes to the management structure, including the president and COO. This was a wide and varied reform program, but from the standpoint of management strategy, the following three measures were aimed at building a foundation for next-generation growth.

### 1) Rebuild the business portfolio

The Air Water Group formulated a concept of “conglomerate management centered on eight businesses” as the concrete form of its rebuilding effort. Essentially, in addition to the five existing internal companies (Industrial Gas, Chemical, Medical, Life Solution & Energy, and Agriculture & Food), we are establishing a new Logistics Company, in the recognition that logistical infrastructure and networks will be essential to future growth strategies. Together with the two main independent businesses (the Seawater and Aerosol businesses), we will combine the functions of regional business companies with these eight businesses, and further broaden our operations.

#### Conglomerate Management and Regional Business Strategies

The Air Water Group is further broadening its operations by combining conglomerate management centered on eight businesses with the functions of eight regional companies.



### 2) Strengthen regional business strategies

We believe that utilizing the regional business bases and markets developed for our original business of industrial gases will be essential for the future development of the Air Water Group. Centered on our eight regional business companies nationwide, we are formulating business strategies matching local needs, and by utilizing the diverse products and services of the corporate group to unearth new markets, building a solid foundation for earnings in Japan, and generating business creation best suited to each region, as well as synergies between businesses. This is the core idea of our regional business strategy.

Air Water further strengthened the structure to implement this strategy as part of its recent management reforms, assigning regional representatives for the four regions with the main concentrations of our business (Hokkaido, Kanto, Koshinetsu, and Kinki). The executive officers appointed as regional representatives (presidents of regional business companies in other areas) oversee the corporate group's business development in their respective



regions, and by pursuing an image of thriving local businesses utilizing regional characteristics, promote harmonious relationships with their local communities.

### 3) Promote diversity

The Air Water Group has expanded its business scale and developed as a corporate group through the driving force of M&A. By merging varied corporate cultures and forming an aggregate of many different businesses, the Air Water Group has developed a culture rooted in accepting diversity in its human assets, who have been brought together from across business fields and industries. We feel that this is one of our greatest strengths.

Diversity is also the source of new value creation for the corporate group, and will be the driving force for further growth beyond 2020. Currently, in addition to incorporating a wide range of people from external sources, we have a multifaceted diversity promotion program to ensure the full participation of women, young people, and all employees through such activities as the “Promoting Women in the Workplace Project” and “Parenting First” programs.

► For further information on the “Promoting Women in the Workplace Project” and “Parenting First” programs to develop the corporate culture, see “Message from Independent Directors” (P34).

### To Our Stakeholders

Continuity and development is a never-ending concern for the public institutions of companies. To achieve this, continually changing form, i.e. “sustainable growth,” is essential. I want Air Water to be a company that constantly thinks about what lies ahead, creates a vision for the future, and continues to grow.

Our management strategies to achieve this have been formed from our All-Weather Management System and Order Rodentia Style of Business. Utilizing M&A and our business approach, we have transformed into a conglomerate comprising diverse businesses. As a result, we have fashioned a multicolored and diverse business fabric with the eight core businesses acting as the warp, and the eight regional companies as the weft, overlapping and complementing each other.

Under this proposition of “continuity and development,” we need to understand the trends of the new era. We are also keenly aware of the need to create a longer-term vision for the future, and continually change our form in line with it.

In FY2017, we are thinking about the form of society in post-2020 and beyond, and have begun formulating a long-term vision for us as a company considered necessary in such a society. I would like to ask all our stakeholders for their continued understanding and support for the Air Water Group as we seek to be a company with never-ending growth, and pursue further challenges as a richly diverse conglomerate.

Chairman and CEO



## Designing the Future of the Air Water Group as COO

Our aim is to be corporate group with enduring growth, utilizing the dual supporting principles of restructuring of existing businesses, and M&A-based growth strategies.

**I am leading the Air Water Group with a focus on achieving our vision of becoming a one-trillion yen company by FY2020, and further growth post-2020.**

### Main Features of Air Water's Growth Strategy

The Air Water Group is focused on achieving its vision of becoming a one-trillion yen company by FY2020 and further growth post-2020, and is steadily implementing strategies for further growth and development in its business fields, based on driving expansion through restructuring of existing businesses and M&A-based growth strategies. We consider the Industrial Gas, Chemical, and Energy businesses as the "existing businesses" that support our business foundation through steady growth, and are strengthening these fields with investment to renew and upgrade facilities, and restructuring. The Medical, Agriculture and Food Products, Logistics, and Other businesses are positioned as pillars for future growth, and we are working to expand their scale through proactive investment centered on M&A and capital investment.

Under this basic strategy, we are deeply cultivating the Industrial Gas Business, our original business and largest source of earnings, by pursuing a VSU strategy centered on increasing gas production at VSU plants and expanding cylinder filling stations by allying our eight regional business companies across Japan with leading partners in those regions. We are also making proactive efforts to develop new sources of demand for gas, including expanding sales of gas applications such as welding equipment and precision washing systems using dry ice.

In the Medical Business, by pursuing market-led operations in individual markets (regional medical services, hospitals, lifestyle medical services, and overseas medical services) and a proactive M&A program, we are strengthening the eight business sectors of hospital facilities, medical services, medical gas, home care, hypodermic needles, dental care, medical supplies, and overseas medical equipment. In particular, considering the increasing number of elderly in Japan, we are focusing particularly on expanding the lifestyle medical services sector.

In the Agriculture and Food Products Business, comprising food solutions, agricultural products, and beverages, we are utilizing our strengths in procurement capacity for food materials based on contract farming to establish strong ties with producers, as well as our product development and production technologies acquired through M&A, to further expand our business scale with proactive investment centered on M&A.

In the Logistics Business, we are breaking away from conventional labor-intensive service businesses, working closely with a wide range of businesses, and gradually shifting to business sectors compatible with our corporate strategy. By further enhancing the temperature-controlled logistics field that is one of the strengths of the corporate group, and establishing a new nationwide network of our own logistics centers, we will transition to a business structure able to provide high value-added logistics services.

In new business sectors, to foster businesses that will provide next-generation growth beyond FY2020, Air Water has identified the three management issues of develop the electric power business, strengthen overseas strategies, and establish a new technology-centered company, and is making strategic investments aimed at future business development.

Through the concerted effort of our businesses pursuing these growth measures, we will achieve our vision of becoming a one-trillion yen company by FY2020, and secure sustained corporate growth into the years beyond.

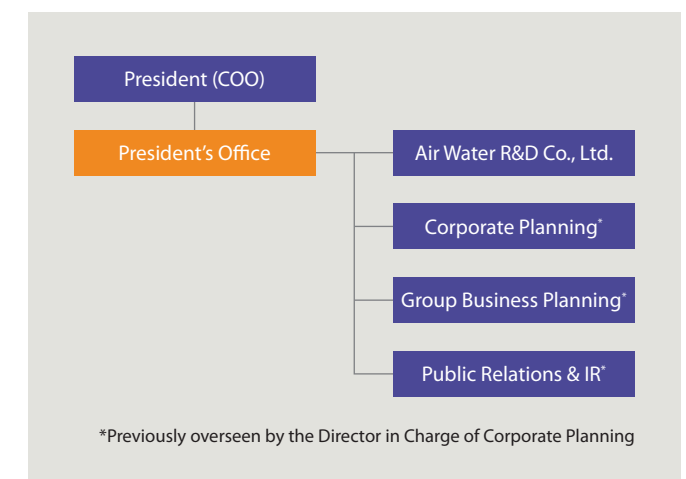
► For a more detailed description of the eight main businesses, including the internal companies and overseas business, see "Business Overview and Features of Business" (P17-30), and for details on the main business fields and strategies of the new Logistics Company, see P27-28.

### Establishment of the President's Office Led by the COO

I was appointed Chief Operating Officer (COO) under the new management structure implemented in April 2017. At the same time, we established the President's Office to oversee Air Water R&D Co., Ltd., as well as the Corporate Planning, Group Business Planning, and Public Relations & IR departments. The President's Office compiles a broad range of information on the corporate group, playing a role to quickly resolve issues through unified management of information, and implementing proactive information strategies as a control tower function for the corporate group. As COO I direct this organization, which serves to bundle the group businesses together into a consolidated whole, and smooth the way to achieve further growth.

#### Outline of the President's Office

The President's Office, centered on the COO, lays the foundation for post-2020, including information strategies.



Based on the idea of "look beyond tomorrow to the coming future, create an image for the entirety of Air Water, and take charge of today," I will guide the formation of the Air Water Group structure to ensure the proper functioning of the principles of restructuring of existing businesses and M&A-based growth strategies, and steadily execute my duties as COO.

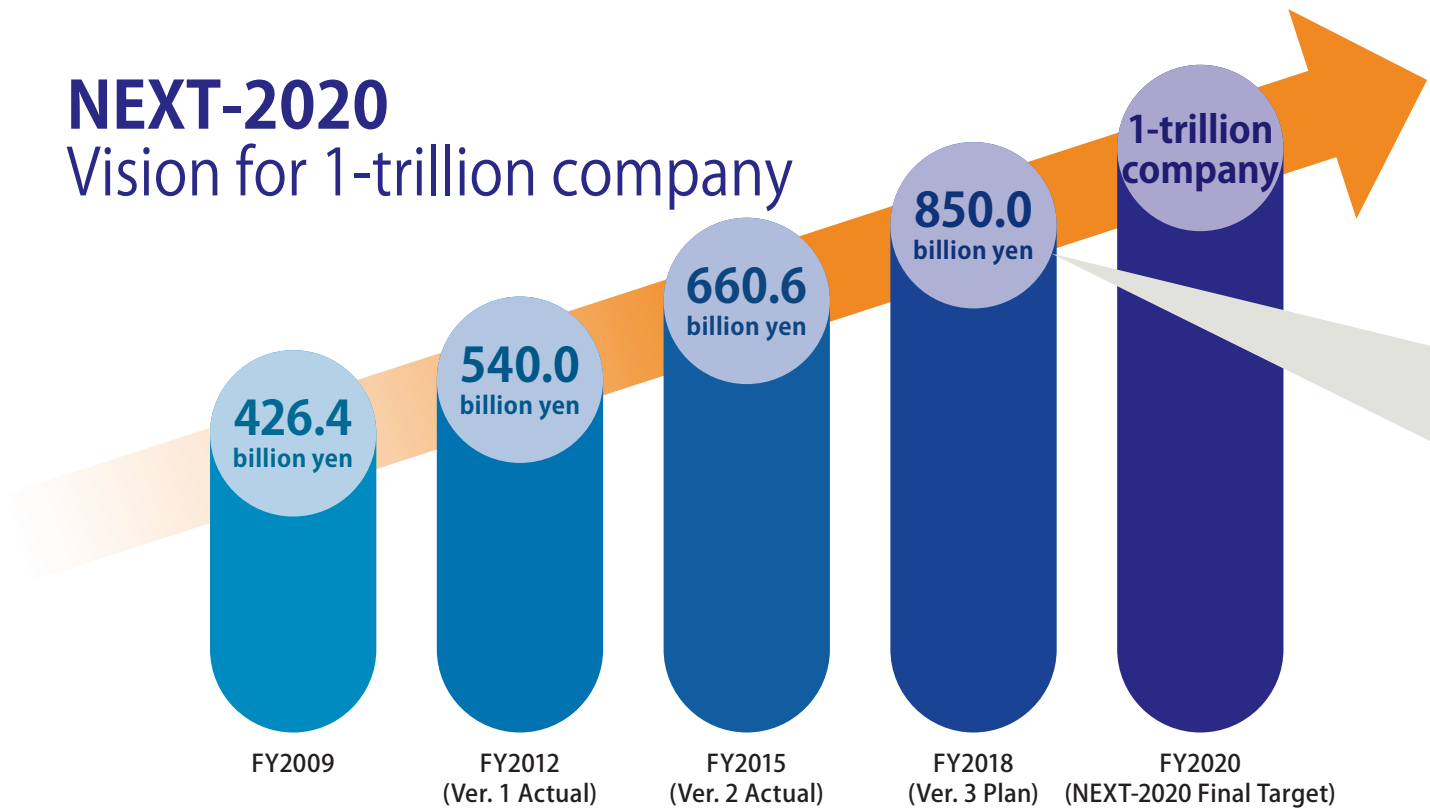
President and COO

*Kiyoshi Shirai*

Kiyoshi Shirai  
President and COO  
Air Water Inc.

# Transition of Medium-term Management Plan “NEXT-2020” and Overview of “NEXT-2020 Ver. 3”

## NEXT-2020 Vision for 1-trillion company



The Air Water Group aims to become a 1-trillion company in FY2020 by reforming its business portfolio through the Medium-term Management Plan “NEXT-2020” launched in FY2010. The Group is currently implementing NEXT-2020 Ver. 3, targeting net sales of 850 billion yen in FY2018.

### Two Business Models for Achieving Net Sales of 1 Trillion Yen

#### All-Weather Management System

“All Weather Management System” is a business model that strives for consistently stable earnings while pursuing an optimal balance of business structure between industry-related businesses (industrial gases and chemicals) and everyday life-related businesses (medical treatment, energy, agriculture and food products, etc.).

#### Order Rodentia Style of Business

“Order Rodentia Style of Business” is a business model for achieving sustainable growth by continually cultivating and producing medium-sized companies that—like rodents—are agile enough to adapt to environmental changes and that have the vitality to flexibly develop new fields and new businesses.

### ● Basic Concept for NEXT-2020 Ver. 3

“Further challenges for structural reform and sustainable growth.”

### ● Three Implementation Measures

- Pursuing ultimate solutions services and providing innovation
- Strengthening corporate structure by implementing structural reforms
- Challenges towards issues for post 2020

#### Earnings Forecast

	Ver. 2 Final year	Medium-term Management Plan NEXT-2020 Ver. 3			Growth in 3 years (compared to FY2015)	
(billion yen)	FY2015	FY2016 (Actual)	FY2017 (Plan)	FY2018 (Plan)	Increase/decrease	Percentage
Net sales	660.6	670.5	760.0	850.0	189.4	128.7%
Operating income	39.5	41.3	44.0	51.0	11.5	129.0%
Ordinary income	35.1	41.3	44.0	51.0	15.9	145.4%
Net income	20.1	22.3	24.0	29.0	8.9	144.0%

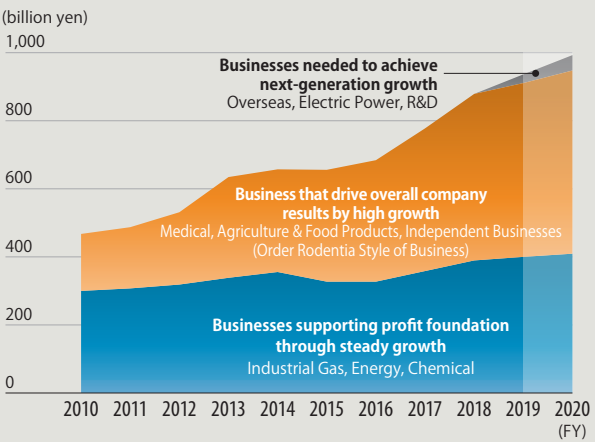
Management indicators	
Recurring margin	More than 6%
ROE	More than 10%
Equity capital ratio	40%
Net D/E ratio	0.75 or less

Three-Year Investment Plan	
Capital Investment	140.0 billion yen
(Depreciation and Amortization)	(90.5 billion yen)
M&A Investment	60.0 billion yen
Strategic Investment (Power Generation)	40.0 billion yen
<b>Total</b>	<b>240.0 billion yen</b>

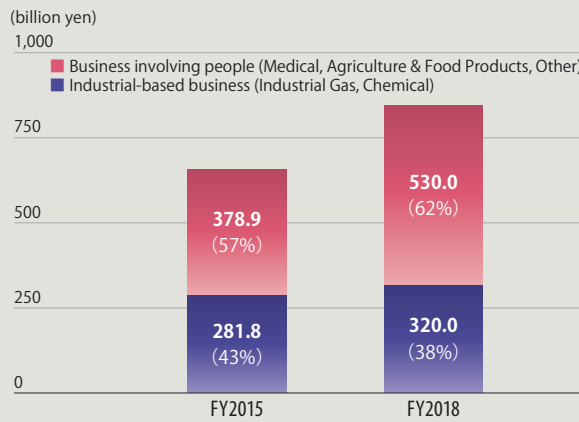
### ● Business Portfolio to be Achieved

Medical Business, Agriculture and Food Products Business and other independent businesses drive growth. Consequently, everyday life-related businesses (Medical Business, Agriculture and Food Products Business, etc.) are expected to account for more than 60% of net sales.

#### Portfolio that achieves growth (sales)



#### Ratio of industrial-based businesses to businesses involving people (sales)



# Close-up

## Management Strategies of the Air Water Group

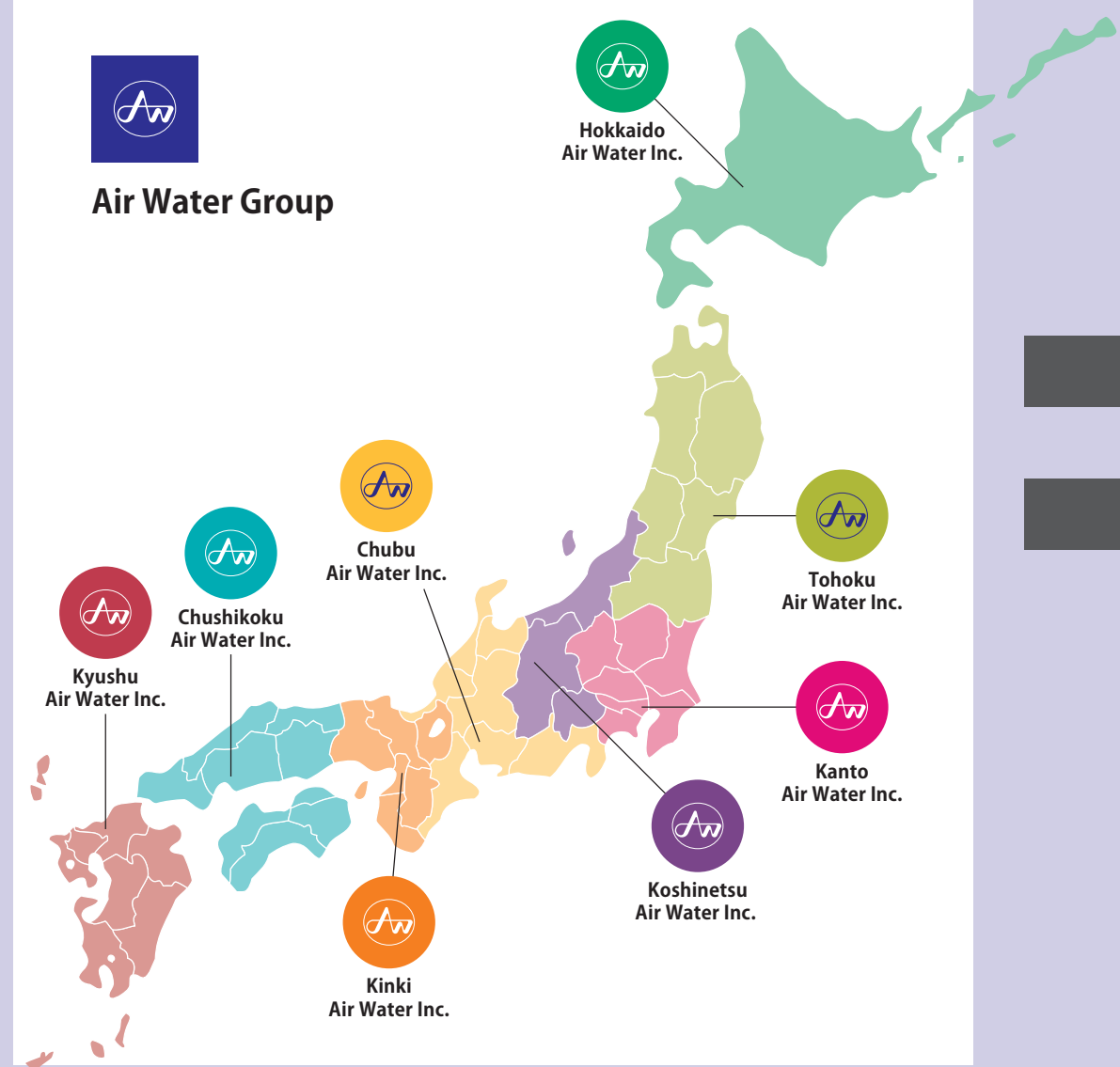
Our name embodies our mission: To create and conduct enterprises that effectively use our planet’s air, water, and other irreplaceable assets, for the purpose of making a meaningful contribution to our fellow human beings across the globe. Our business momentum comes from our eight community-based regional business companies. Our regional business companies collaborate with our eight business divisions and group companies under their control to weave together the various technologies, products and services of the Air Water Group and to create new products and business models that meet the specific market and customer needs of each region.

### Eight Main Businesses Vertical Strands of Business

- Industrial Gas
- Chemicals
- Medical
- Energy
- Agriculture and Food
- Logistics
- Seawater
- Aerosol



### Eight Regions Throughout Japan Horizontal Strands of Business



As a rich and diverse group made up of 16 horizontal and vertical threads, the Air Water Group delivers maximum value.



The horizontal and vertical threads overlap and complement one another to produce a fabric with exquisite strength and stretch, in other words, business which is imbued with the characteristics of each region



# Close-up

## Regional Strategies of the Air Water Group

### To make every single strand thicker and stronger and to give strands their own unique character.

It is already a quarter of a century since the Air Water Group introduced its regional business company concept. Leveraging a richly diverse conglomerate with as many as 243 group companies and 12,580 employees as of the end of March 2017, our regional business companies, which operate in eight regions across Japan, are devoted to pursuing community-based initiatives.

In the Kanto area, which has the largest population and consumer market out of the eight regions, employees accounting for more than 30% of the Group's total workforce are engaged in business activities, focusing on the creation of businesses that tap into regional characteristics and the businesses accumulated by the Group and which are closely linked to lifestyle and industry.

Each Group company and each individual makes every single strand thicker and stronger and gives these strands their own unique character— this is precisely what creates momentum for the Air Water Group's sustainable growth.

This Close-up gives an insight into activities on the ground in the Kanto area through group company Air Water Carbonic Inc. and the medical business of regional business company Kanto Air Water, Inc.



### Making every single strand thicker and stronger: Kawasaki Plant of Air Water Carbonic Inc. is completed

Since its establishment in 1971, Air Water Carbonic Inc. has been involved in collecting and refining carbon dioxide mainly produced as a side product from oil refineries and ammonia plants and in manufacturing and selling liquefied carbon dioxide<sup>\*1</sup> and dry ice<sup>\*2</sup>. Air Water Carbonic commands a share of around 20% of the Japanese domestic market for liquefied carbon dioxide and is leader of the domestic market for dry ice, with a share of around 50% (Air Water Carbonic estimates, FY2016).

In recent years in Japan, the closure, down-scaling and conversion of refineries in compliance with directives on the Act on Sophisticated Methods of Energy Supply Structures from the Ministry of Economy, Trade and Industry triggered by excessive crude oil processing has resulted in a severe imbalance between the supply and demand of carbon dioxide and led to chronic tightness. In recent years, Air Water Carbonic established liquefied carbon dioxide plants in Sanyo-Onoda, Muroran and Kawasaki and has led the industry in seeking to strengthen stable supply.

In particular, the Kawasaki Plant (on the premises of the Kawasaki Oil Refinery of JXTG Nippon Oil & Energy Corporation) completed in March 2017 contributed to a 20% increase in supply capacity through the use of Air Water Carbonic's own plant. With procurement of high quality, high concentration raw material gas, high energy efficiency achieved through proprietary manufacturing technologies, and a good location as strengths, the Kawasaki Plant plays an important role in building a structure for flexibly meeting demand in the Kanto area, which is the largest market in Japan, or in other words, in making the strand thicker and stronger.

<sup>\*1</sup>: Around 50% is used in shielding gases for welding (shipbuilding, automotive and construction sectors). Carbon dioxide is also used in applications such as beverages, cooling and chemicals and, in recent years, in crop forcing and the medical sector.

<sup>\*2</sup>: The majority is used for expanding low-temperature logistics for food products. Dry ice is also used for cleaning and for the transportation of pharmaceuticals, precision instruments and semiconductor products.



### Giving diverse strands their own unique character: Medical business of Kanto Air Water Inc.

Covering a market ranging from university hospitals to clinics, the medical business is a strategic business for Kanto Air and Water, accounting for around 50% of its sales.

In the Industrial Gas Business, the Air Water Group completed construction of the Saitama Gas Center (filling plant) in 2016. The Air Water Group is leveraging its network of gas centers, which its competitors do not have at their disposal, to strengthen relationships with local dealers.

Meanwhile, Kanto Air and Gas is bolstering its medical services business including SPD (Supply Processing & Distribution) and contract sterilization, enabling reduction in medical material costs and labor costs, which account for the majority of hospital running costs. Especially in the area of SPD services, Kanto Air and Gas is exploring its own unique market development, effectively utilizing information provided by staff permanently stationed at hospitals to strengthen the creation of mechanisms for proposing improvements to hospital operations.

Having acquired diverse upstream and downstream medical solutions through M&A over the past few years, Kanto Air Water is now working on the creation of the best medical services by properly understanding the features of each solution and weaving together diverse threads.



### Practice of "One Air Water": Launch of the Kanto Information Exchange Meetings

The Air Water Group is seeking to strengthen its cohesiveness and comprehensive strength as a corporate group under the slogan "One Air Water." In the Kanto area, the Group launched the Group Information Exchange Meeting in April 2014. A meeting will be held once every three months.

Formed to enhance the effectiveness of regional strategies, the information exchange meeting was attended by the representatives of 34 companies mainly from Kanto Air Water. To begin with, each group company shared information about their "people and products" to strengthen collaboration. Such Group Information Exchange Meetings are also held by other regional business companies.



# Industrial Gas Business

## Review of FY2016

The industrial gas market was buoyant due to solid gas demand in Japan's manufacturing industry. Major customers included the steel sector, which enjoyed firm demand especially in Japan, the automotive sector, which increased production to meet robust U.S. demand, the electronic components sector, which experienced growth in demand for smartphones and IoT applications, and the chemicals sector, which maintained a high level of production activity. Amidst these circumstances, the Industrial Gas Group leveraged the network of regional companies across Japan to actively promote the development of gas demand. It also concentrated on proposals for gas applications such as the dry ice snow precision cleaning system. The manufacturing costs of industrial gases began to rise in the second half of the fiscal year despite benefiting from a fall in fuel adjustment costs which are included in the cost of electricity. The Industrial Gas Group therefore sought to keep logistics costs at a reasonable level and to ensure appropriate industrial gas prices. In the Engineering Business, orders received for the production of onsite plants increased.

## Outlook for FY2017

In Japan's manufacturing industry, construction and materials-related production are expected to remain solid in the run-up to the Tokyo Olympics and Paralympics, and gas demand is likely to pick up. In this environment, the Industrial Gas Business will continue to push ahead with the strengthening of regional-based businesses. It will make steady headway with the strategic establishment of VSUs and other gas production sites, the enhancement of filling stations for gas subdivision, and expansion of sales volume in every region throughout Japan. In the Onsite Business, a state-of-the-art high efficiency plant will commence operations at the Kakogawa Works of Kobe Steel, Ltd. in October. On the Engineering Business side, the Industrial Gas Business began spinning off relevant subsidiaries by function in FY2017 to build a competitive machinery production structure. It is also constructing a new plant in Sakai City, Osaka with the aim of expanding production capacity. The Industrial Gas Business will establish a robust structure for the Engineering Business by further refining the cryogenic technology and other gas technologies it has accumulated over many years while at the same time striving to become more cost competitive.

## TOPICS

### Construction of VSU plants at two sites in the western Kyushu region

The VSU high-efficiency, compact liquefied oxygen/nitrogen production plant simultaneously achieves "stable supply," "energy conservation" and "reduction of CO<sub>2</sub> emissions" through its establishment on the outskirts of the region in which customers are located. The biggest advantage of the VSU is that it vastly shortens transportation distance to customers compared with supply from large plants. Keeping pace with its rollout of VSUs, the Industrial Gas Business is promoting a new business model through joint ventures with local industries and local companies familiar with the demand structure.

In FY2016, the Industrial Gas Business built its 13th VSU in Isahaya City, Nagasaki Prefecture and a VSUA (high-efficiency, compact liquefied oxygen/nitrogen/argon production plant) to replace an aging plant in Ōmura City, Fukuoka Prefecture, with the aim of achieving stable supply in the western Kyushu region. Both plants were established in collaboration with Fukuoka Oxygen Mfg Co., Ltd., which operates across a wide area of Kyushu, focusing on Fukuoka Prefecture. Together, the two sites will meet gas demand in the region. Currently, the Air Water Group has 15 VSUs in operation throughout Japan from Hokkaido to Kyushu and, next fiscal year, the Group is planning its 16th VSU in Iwate Prefecture and is working to expand its area of coverage.

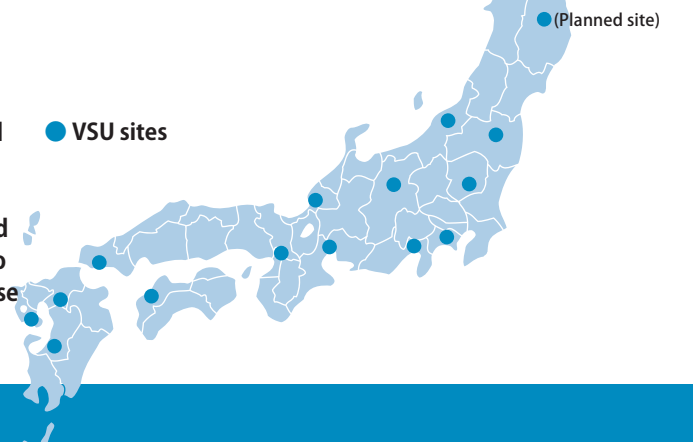


Nagasaki Ekisan

## Business Overview and Features of Business

The Industrial Gas Business delivers a stable supply of industrial gases such as oxygen, nitrogen, argon and carbon dioxide to customers throughout Japan. Besides offering the optimum supply method, ranging from supply using cylinders or liquefied gas tank trucks to onsite supply, the Industrial Gas Business also offers a diverse lineup of gas applications that make effective use of the properties of industrial gases, and industrial equipment.

● VSU sites



### Industrial Gas

#### Onsite Supply



Air Water installs plant next to steelworks and chemical plants that require a large volume of high-purity oxygen, nitrogen or argon and provides supply through piping.

#### Mini Onsite Supply



Air Water provides a stable supply to industries with medium-scale demand such as semiconductors, liquid crystals and paper pulp industries by installing small to medium-scale gas generation equipment such as the V1, which manufactures high purity nitrogen gas.

#### Tank Trucks Supply



Air Water delivers various types of liquefied gas produced at manufacturing plants to customers' plants. Thanks to its supply network which covers the whole of Japan, Air Water has established a secure and safe supply structure.

#### Cylinder Supply



Air Water supplies cylinders, gas cylinder bundles, LGC (ultra-low temperature liquefied gas containers), etc. to various local industries by the method most appropriate to usage and purpose.

#### Industrial Equipment



Air Water supplies industrial equipment related to welding and cutting, such as ELNACKS®, an argon-based gas for welding, and offers welding solution services.

#### Gas Applications



Air Water develops and proposes gas equipment and systems which effectively use the properties of industrial gases to contribute to the improvement of production efficiency or the sophistication of technology.

#### Types of gas

Oxygen

Nitrogen

Argon

Carbonic Dioxide

Hydrogen

Helium

Rare Gas Xenon, Krypton, Neon

Welding Gas ELNACKS, DIE ARGON, AW SHIELD, HOKUSEAL

Cutting Gas DIETHYLENE, DIE CUT, DIE LASER, Acetylene

Others High-purity Ammonia, Ethylene Oxide, Semiconductor Specialty Gas, Stable Isotopic Gas, etc.

#### Engineering



Air Water's Engineering Business deals with everything from the process engineering of cryogenic air separation systems, a fundamental technology in gas manufacturing, to the design, fabrication and safety management of gas equipment and devices.





# Chemical Business

## Review of FY2016

In Coal Chemical businesses, the processing volume for coke oven gas refinement decreased, and the processing unit price also fell sharply as a result of market volatility. Both sales and profits for crude benzene, a core basic chemicals product, were sluggish because, although sales volume was secured, product prices fell. At Kawasaki Kasei Chemicals, a consolidated subsidiary, sales of mainstay quinone-based products expanded steadily. However, sales of general-purpose products such as phthalic anhydride fell, affected by market volatility. The Tar Distillation Business conducted by C-Chem Co., Ltd., an equity-method affiliate, continued to face challenging business conditions for the second year running in the absence of recovery in global demand for needle coke for electric furnace electrodes. In FY2016, the Chemical Business was no longer affected by impairment losses on shares of a Chinese subsidiary recognized in the previous fiscal year. Nonetheless, it continued to show a deficit and conditions remained challenging.

## Outlook for FY2017

Currently, both the Coal Chemical Business and the Fine Chemical Business are implementing business restructuring. The Chemical Business in general is now over the worst thanks to more favorable exchange rates and market conditions. In particular, the outlook for the Tar Distillation Business is now brighter, with demand for needle coke picking up and prices also entering an upward phase. The Coal Chemical Business will expand sales of Thermally Expandable Graphite (TEG) and build its base as a business that generates stable profit along with gas refinement and the sale of basic chemicals. The Fine Chemical Business will complete the disposal of unprofitable business to establish a stable profit structure. As a strategy for further growth, Kawasaki Kasei Chemicals will assume a central role in expanding the functional chemical field and pursuing synergies through the fusion of technologies, etc.

## TOPICS

### Kawasaki Kasei Chemicals Ltd.: only company in the world to commercially produce naphthoquinone

Kawasaki Kasei Chemicals, which joined the Air Water Group in June 2015, has been manufacturing intermediate materials for building materials, information and electronics materials, food products, and pharmaceutical and agricultural products from petroleum and coal-based raw materials since its establishment in 1948. It is the only company in the world to commercially produce naphthoquinone, developing the catalysts and processes in-house. The bioactivity of naphthoquinone used as a raw material is utilized in agricultural chemicals and fungicides which protect crops from insects and molds. Kawasaki Kasei Chemicals is also Japan's leading manufacturer of phthalic anhydride and the organic acid called succinic acid, which are used as a raw material for plasticizer and paint.

Moving forward, the company aims to create a highly profitable business structure by bolstering the core general-purpose chemical business, which consists mainly of phthalic anhydride and plasticizer, and strengthening and expanding the functional chemical business, which includes quinone-based products and MAXIMOL®. Especially in the field of functional chemicals, the company will market new naphthoquinone derivatives in the information and electronics materials sector and pharmaceutical sector.

In collaboration with the Air Water Group, Kawasaki Kasei Chemicals met the need for increased production of the active ingredients of agricultural chemicals by conducting certain production processes at the Wakayama Plant and sought the establishment of a stable supply structure. Kawasaki Kasei Chemicals and other Air Water Group companies are utilizing each other basic technologies and production technologies

to conduct in-house development and trial production of functional chemicals and they are also steadily notching up successes in the demonstration of synergies through cooperation.



Product sample

## Business Overview and Features of Business

### Steelmaking-related Business

Gas Purification Basic Chemicals  
Tar Distillation

### Functional Chemical Business

Carbon Materials Fine Chemicals  
Kawasaki Kasei Chemicals Ltd.

The Chemical Business develops and produces high value-added chemical materials, ranging from coal chemicals to fine chemicals, and delivers a stable supply of products to various customers inside and outside Japan. Leveraging its global network of production sites, the Chemical Business meets the diverse material development needs of customers with products such as basic chemicals produced by separating and refining useful ingredients from coke oven gas and coal tar, and carbon materials and fine chemicals produced through sophisticated chemical synthesizing technologies.

## Coal Chemicals

### Gas Purification



Coke oven gas that is produced as a byproduct in the manufacturing of coke, a blast furnace fuel at steelworks, is separated and refined in order to supply steelworks with the purified gas (fuel gas) essential for blast furnace operation.

### Carbon Materials



Carbon materials such as Thermally Expandable Graphite (TEG) and FR hydrocarbon resin are supplied as additives which add properties such as high tensile strength and flame resistance to automotive tires and construction materials.

### Basic Chemicals

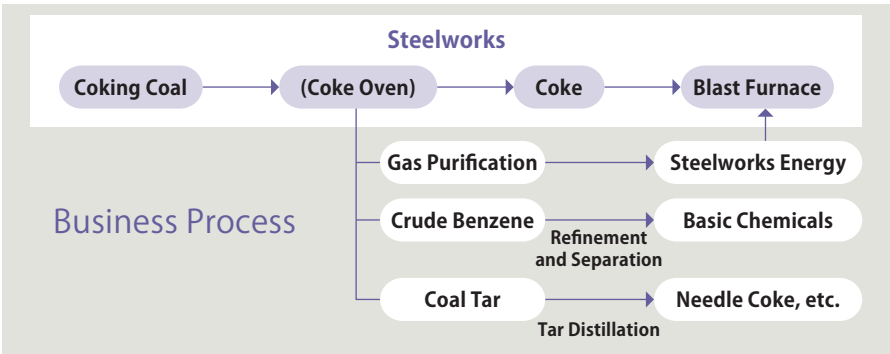


Basic chemicals such as crude benzene and ammonium sulfate are produced in the purification process of coke oven gas. These products are used as raw materials for a wide variety of industrial products, including resins, agricultural fertilizers, and synthetic fibers.

### Tar Distillation

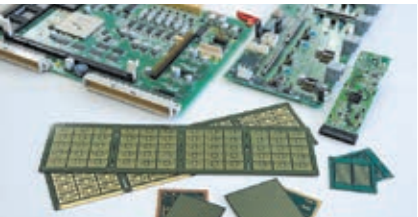


Coal tar is used as a raw material to manufacture tar-derived products such as needle coke for electric furnace electrodes, naphthalene and phthalic anhydride, which are supplied to the global market.



## Fine Chemicals

### Electronics Materials



Liquid air oxidation, nitration, and other synthesizing technologies are utilized to manufacture semiconductor sealant SK Resin. Semiconductor substrates and general-purpose circuit boards are also manufactured and sold.

### Pharmaceutical and Agricultural Chemical Intermediates



The Group's strong arsenal of heterocyclic compounds, which play an important physiological role, are used in the synthesis of various derivatives to meet the diverse development needs of customers.

### Kawasaki Kasei Chemicals Ltd.



Since its foundation in 1948, Kawasaki Kasei Chemicals has manufactured intermediate materials for building materials, information and electronics materials, food products, and pharmaceutical and agricultural products. It also handles a range of functional chemicals including quinone-based products.





# Medical Business

## Review of FY2016

In the Advanced Medical Business, which targets general hospitals and specialist medical institutions, the Air Water Group worked together to provide technologies and services, including the design and installation of operating rooms and intensive care units and hospital gas supply equipment. The Group also enhanced comprehensive hospital support services such as sterilization and SPD (in-hospital logistics and inventory management system) services, and made progress with the construction of sterilization satellite sites to meet regional demand. Sales of medical equipment sector remained firm as inhaled nitric oxide therapy became more widespread. Meanwhile, the Group implemented measures to secure sales volume of medical gas, which occupies an important position in its regional strategies, amid little prospect of market expansion.

In the Lifestyle Medical Business, which provides products and services in areas closer to consumers, the Group made Kawamoto Corporation, which mainly manufactures and sells sanitary materials, into a consolidated subsidiary, and also made Ci Medical Co., Ltd., which is engaged in mail-order sales of dental care products, into an equity-method affiliate.

## Outlook for FY2017

The Medical Business will strengthen its structure to enable comprehensive proposals of diverse products and services ranging from the latest equipment for hospitals to medical BPO services, community clinics and home care. In addition to targeting hospitals offering advanced medical care, the Medical Business will also expand the Lifestyle Medical Business for the large medical market close to people's lives which includes clinics, dental care, home care, and drugstores. The Medical Business will also focus on the introduction of new technologies from overseas and the expansion of its product lineup. At a time when initiatives to curb medical spending are needed, the Medical Business will stay on the growth path by building a business structure that can accurately grasp and meet changing medical needs.

## TOPICS

### Ci Medical Co., Ltd. and Kawamoto Corporation join the Air Water Group

In October 2016, Air Water concluded a capital and business alliance agreement with Ci Medical Co., Ltd., which excels in the development of mail order dental supplies and possesses a high level of mail-order sales knowhow. As a result of the agreement, Air Water acquired a 40% stake in Ci Medical. In December 2016, Air Water also made sanitary materials manufacturer Kawamoto Corporation into a consolidated subsidiary. With a history dating back to 1931, Kawamoto Corporation is listed on the Second Section of the Tokyo Stock Exchange.

In the past, the growth of Air Water's Medical Business has been driven by the business of providing medical gas and other equipment and services to medical institutions throughout Japan. However, moving forward, Air Water will expand into the Lifestyle Medical Business which will be more closely aligned with consumers. By leveraging Ci Medical's sales techniques which incorporate mail order sales functions and Kawamoto Corporation's sales channels in the Medical Business, Air Water aims to create a high level of synergy in diverse areas ranging from Advanced Medical Business to Lifestyle Medical Business and to push ahead with the establishment of a completely new business structure.



Ci Medical Co., Ltd.

Products of Kawamoto Corporation

## Business Overview and Features of Business

The Medical Business provides diverse products and services, ranging from the latest equipment for hospitals on the increasingly sophisticated medical frontline to the supply of medical gas, medical BOP services, equipment maintenance services, community clinics and home care.

### Four Markets and Eight Businesses



## Advanced Medical Business

### Hospital Facilities



Air Water is involved in the design and installation of operating rooms and intensive care units (ICUs), which are core features of hospitals, and gas supply facilities such as medical gas piping, and creates optimal medical environments utilizing extensive experience and cutting-edge technologies.

### Medical Gas



Through its nationwide supply network, Air Water delivers a stable supply of medical oxygen and also supplies a variety of other medical gases such as nitric oxide products, liquefied helium for MR imaging, and sterilization gas.

### Medical Services



Air Water helps hospitals to operate more efficiently by providing medical BOP services to support hospital management and operations, including in-hospital logistics management and the sterilization of medical instruments.

### Sanitary Materials



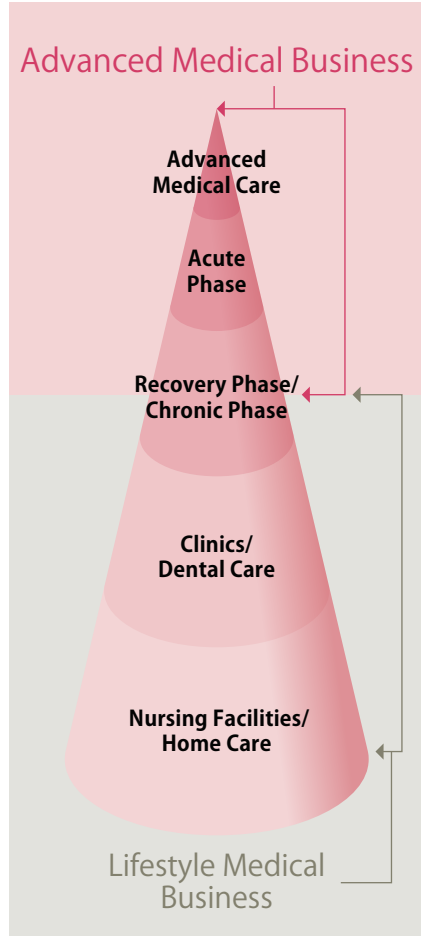
Air Water has strength in the development of products with special features such as sterilized gauze and sterilized BEMSHEETS, etc. for operating rooms and it is also putting effort into products for general consumers such as oral care products and baby products.

### Medical Equipment



In collaboration with global medical equipment manufacturers, Air Water provides mainly ventilator-related equipment as well as cardiovascular and nursing care equipment for which it offers distribution and maintenance services.

### Medical Market Segments and Air Water's Business Domains



## Lifestyle Medical Business

### Home Care



Air Water helps patients with respiratory problems to live comfortably everyday through home oxygen therapy, which involves breathing in air that contains more oxygen than normal using a home oxygen concentrator.

### Dental Care and Hypodermic Needles



Air Water manufactures and sells dental and orthodontic equipment and materials mainly to dental clinics and orthodontists. It is also engaged in mail-order sales of dental care products in general. Air Water started the hypodermic needle business in 2007, and uses outstanding grinding and machining technologies to manufacture hypodermic needles in Japan for sale globally.





# Energy Business

## Review of FY2016

With LP gas business conditions remaining challenging amid a downward trend in energy use per household, the Energy Business actively focused on the acquisition of commercial rights to improve the ratio of direct sales and on strengthening sales in the retail sector. Consequently, while net sales of LP gas decreased due to falling import prices, sales volume increased. The Energy Business also sought to acquire new customers for LP gas by pushing for fuel conversion and increased sales of industrial LP gas. The Energy Business sought to keeping procurement of kerosene to a reasonable level during the demand phase. It also endeavored to acquire new customers and increase sales volume for kerosene by expanding the scope of the service which awards electronic money according to the value of purchases of LP gas to include purchases of kerosene. The unit selling price of LNG (liquefied natural gas) fell, and sales of LNG tank containers also showed decline.

## Outlook for FY2017

The Energy Business will aim for further growth in the number of customers and sales volume for both LP gas and kerosene by actively proposing energy-saving equipment and its unique service with WAON points. The Energy Business will push for industry to switch from heavy fuel oil in anticipation of the low-carbon age. It will also make energy proposals in each region to the diverse customers of regional business companies in industrial and medical markets and to partner companies. Seeing market competition resulting from the recent liberalization of the electricity and gas industries as a business opportunity for future business restructuring, the Energy Business will create business models which fuse Air Water's technologies, services and infrastructure in each region and aim to become a comprehensive energy services provider which is able to propose the best mix of LP gas, kerosene, LNG and electricity.

## TOPICS

### Collaboration with the Hokkaido Electric Power Company in LNG sales and LP gas retail operations

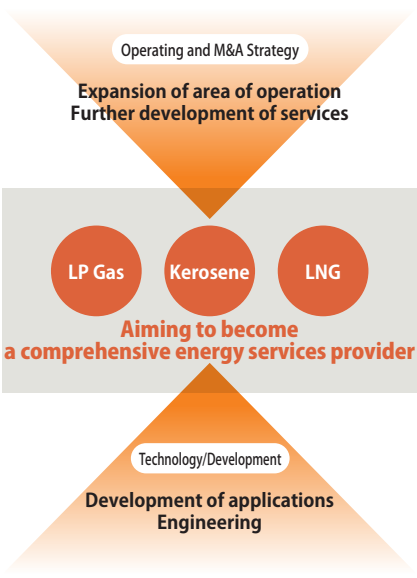
In April 2017, Air Water and the Hokkaido Electric Power Company (HEPCO) reached a basic agreement on a business tie-up for the start of LNG supply business. With the completion of the LNG tanks which HEPCO is building at its Ishikari LNG terminal (scheduled for August 2018), the two companies plan to collaborate over the sale and transportation of LNG, the maintenance and management of equipment, and other incidental operations. They are now in the process of discussing the finer details business tie-up. Air Water was quick to focus on natural gas, which is arousing increasing expectation as a next-generation energy source, and began supply by pipeline at the Chitose Airport Industrial Complex in 1999. With strength in the development of LNG equipment using ultra-low temperature technology, and engineering services, Air Water has a great many business opportunities open to it. Air Water also plans to collaborate with HEPCO in retail operations. Through cooperation with HEPCO, which has a solid business base in Hokkaido, in the points service, Air Water will strengthen contact points with customers and build a base in the region for selling LP gas and kerosene. Air Water will continue examining multi-faceted business expansion in the future, aiming to establish itself as a comprehensive energy services provider.



LNG tank trucks

## Business Overview and Features of Business

Air Water has been supplying energy for more than half a century, since the early days of Japan's LP gas market. Air Water currently markets LP gas and kerosene under the Hello Gas brand. It plays an essential role enriching community life by supplying energy for daily life to general households, commercial facilities, hospitals and other public facilities and by supplying energy for industry to plants, etc. Air Water is also actively focusing on the manufacture and sale of LNG-related equipment as new energy solutions, and is making steps toward becoming a comprehensive energy service provider.



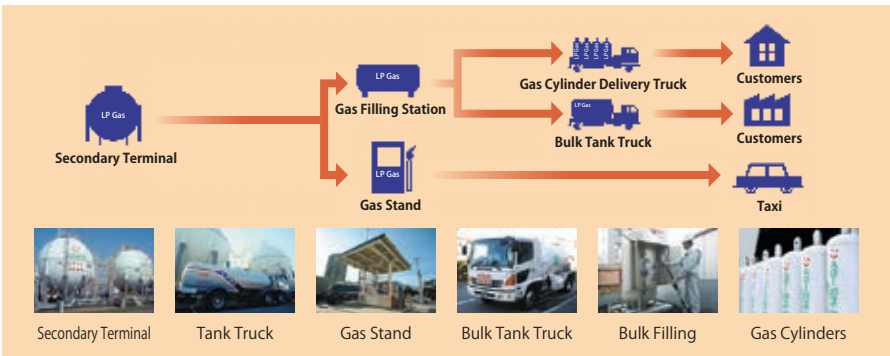
## LP Gas and Kerosene

### LP Gas



Air Water delivers LP gas under the Hello Gas brand, as environmentally friendly, clean energy essential for regional communities and industry.

### ● Illustration of LP Gas Supply



### Kerosene



Usually used as energy for hot water and heating, kerosene is equally important as LP gas, and Air Water delivers a stable supply directly to households.

### Energy Equipment



Besides energy supply-related services, Air Water works to provide total support services from diverse perspectives by staying close to customers lives and are deeply rooted in community life.

### Fuel Conversion



By leveraging the characteristics of LP gas, a form of dispersible energy that can be supplied during emergencies and reduces CO<sub>2</sub> emissions, Air Water proposes a shift away from the use of heavy fuel oil in industrial applications to LP gas.

## Natural Gas

### Natural Gas Supply



Natural gas from the Yufutsu gas field in Tomakomai, Hokkaido is pumped down Air Water's own gas pipeline to the Chitose Natural Gas Distribution Center in the Chitose Airport Industrial Complex to provide a stable supply to the industrial park.

### LNG Satellite Supply



Air Water designs and installs unloading facilities for LNG transported to areas of demand by tank truck, etc. according to customers' usage requirements.

### LNG Transport



Utilizing ultralow temperature technology and unique knowhow built up over many years, Air Water manufactures and sells tank trucks and containers capable of long-distance bulk transportation of LNG.



# Agriculture and Food Products Business

## Review of FY2016

In Agricultural Produce, procurement and quality of raw materials were severely affected because typhoons caused crop failure in the Tokachi District of Hokkaido, a key producing area. However, the Air Water Group worked to improve the efficiency of vegetable processing and increase productivity to offset the impact of the poor harvest. In Fruit/Vegetable Distribution, the Air Water Group conducted a thoroughgoing review of profitability at each store. It also increased the volume of Group products handled and pursued expansion of the value chain. In the Food Solutions Business, which handles processed foods, the Air Water Group made Daisen Ham, Co., Ltd., which has strong community-driven brand power in the Ham and Delicatessen area, into a consolidated subsidiary. Also aiming to expand business in the Sweets area, the Air Water Group made the Plecia Group, which excels at proposal-based product development, into a consolidated subsidiary. The Beverages business grew, largely due to strong demand for beverages in the summer, brisk sales of fruit and vegetable juices, and the effect of lower manufacturing costs. Through M&A, the Air Water Group established three pillars in the Agriculture and Food Products Business: Agricultural Produce, Food Solutions and Beverages. As a Group, we have been creating a value chain and build a distinctive business model.

## Outlook for FY2017

In the Agriculture and Food Business, as each company that joined the Air Water Group through M&A grows, the Air Water Group is identifying synergies between them. Now, as the circle of Group companies widens, Air Water sees the knowledge, technology, experience, contacts and other resources of Group companies as the comprehensive strength of the Group and is tapping into and utilizing these resources in areas such as market analysis, product development, risk management and sales proposals. In the Agricultural Produce business, Air Water will push for expansion of producing areas to protect against the risk of extreme weather events and suchlike. In the Food Solutions Business, Air Water will strengthen the foundation of each company that joined the Group in FY2016. In the Beverages Business, Air Water will establish a juice production line at Eniwa Plant in Hokkaido and pursue the development of Hokkaido brand fruit and vegetable juices. Moving forward, the Group will continue accelerating growth through efficient investment focusing on M&A.

## TOPICS

### Harnessing Group companies to create new solutions

In the Agriculture and Food Products Business, Air Water has welcomed companies engaged in unique businesses to the Group, mainly through M&A, and as each of these companies develops its strengths and grows, Air Water is identifying synergies within the Group, aiming to create products and services with higher quality and higher added value.

In August 2016, the Air Water Group made Air Water Tokachi Foods Co., Ltd. into a Group company. Air Water Tokachi Foods Co., Ltd. has a high level of processing technology and manufactures processed and canned agricultural products such as sweetcorn and pumpkin, and sauces and soups. The Air Water Group will promote cooperation between Air Water Tokachi Foods Co., Ltd., Tomiichi Co., Ltd. and Hayasiya Co., Ltd. in the procurement of Hokkaido-grown vegetables, and the integration and enhancement of their processing technology and knowhow.

Meanwhile, Gold-Pak Co., Ltd., which is responsible for the Beverages Business, installed one of the largest juice production lines in Hokkaido at its Eniwa Plant (Eniwa City, Hokkaido) in July 2017. Gold-Pak can now process tomatoes, kale and other produce grown by AW Farm Chitose Co., Ltd. into the raw materials for juice, etc., while still fresh.

Paying careful attention to producing areas and leveraging its ability to secure a stable supply of raw materials, the Air Water Group will continue to further enhance its ability to develop and propose products to customers, and will firmly establish a presence in the Agriculture and Food Products Business.

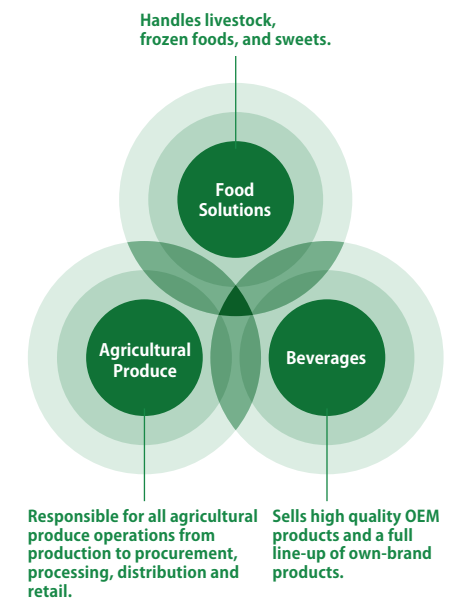


Tomato washing process in the juice production line at Gold-Pak Co., Ltd.'s Eniwa Plant

## Business Overview and Features of Business

Originating from the sale of frozen food products using liquid nitrogen, the Food Products business expanded into the Ham and Sausage Business in 2002. Later in 2009, the Air Water Group established Air Water Farm Agricultural Production Corporation and made a full-scale entry into the Agricultural Produce Business. Since then, Air Water has expanded the business into the distribution and processing of fruit, the manufacturing of fruit and vegetable juices, and the manufacturing and sale of sweets.

Through the integration of functions ranging from vegetable production to the distribution of food and beverage products across Japan into the Air Water Group, the Agriculture and Food Products Business is creating a new value chain that maximizes Group synergies.



## Food Solutions

### Ham and Sausage Business



The Air Water Group offers customers throughout Japan high-end ham and sausage products, with an emphasis on Japanese ham, under the three brands: SYUNSETSU, Sagami Ham and Daisen Ham.

### Agricultural Products



The Air Water Group uses carefully selected seasonal ingredients to manufacture high quality frozen foods and flavorful sauces, and meets the needs of professional chefs and the food service industry through new applications and menu proposals.

### Sweets



Paying careful attention to ingredients and manufacturing methods, Air Water delights and impresses with its extensive lineup of delicious sweets, ranging from Japanese confectionery to Western confectionery.

## Agriculture

### Cultivation



Air Water is involved in the production of tomatoes and other vegetables at the Chitose Farm in Hokkaido, which has one of Japan's largest greenhouses, and the Azumino Farm in Shinshu.

### Agricultural Machines and Tools



The Air Water Group manufactures and sells agricultural machinery, focusing on beet harvesters and cultivators.

### Procurement and Processing



Harnessing its production, processing and distribution network, the Air Water Group offers mostly Hokkaido-grown fruit, processed foods and frozen foods throughout Japan.

### Distribution and Sale



KYUSUYUYA, the operator of a large chain of fruit and vegetable specialty stores in Japan, offers safe and secure vegetables and fruit with flavor and freshness.

## Beverages

### Vegetable and Fruit Juices



The Air Water Group sells vegetable and fruit juices using rich natural ingredients and other high-quality products under third-party brands on an OEM basis or under its own brands.

### Home Delivery Water



Air Water delivers AW Water, a safe and secure mineral water with a delicious taste, to customers around Japan through its home delivery water service.





# Logistics Business

## Review of FY2016

Air Water's Logistics Business utilizes the fine, low-temperature transport technology developed in Air Water's Industrial Gas Business to offer "food product logistics" that maintain freshness through meticulous temperature regulation and "medical logistics" involving the transport of blood (blood plasma) collected at blood centers around the country. The Air Water Group conducts comprehensive logistics business, including general cargo business ranging from container transport to the transportation of small- and medium-sized cargo lots, the distribution business with warehouse functions, and even the design and manufacture of the bodies of vehicles. In FY2016, the Group won delivery contracts in new areas in its food product logistics operations. It also increased cargo volume in its general logistics operations. Furthermore, by promoting improvement in delivery efficiency and productivity and pushing for greater efficiency across all logistics business operations, Air Water minimized the impact of higher costs and maintained a solid performance.

## Outlook for FY2017

In the Logistics Business, Air Water will accelerate integration of the logistics operations of the Air Water Group and seek to increase the business capacity of the Group as a whole. This will address the logistics challenges faced by Japan such as the national shortage of drivers, and, through far-reaching initiatives to optimize the supply chain (procurement, production, storage and transportation) of each of the Air Water Group's businesses, the Logistics Business will help increase business competitiveness.

Air Water will also seek to strengthen and expand low-temperature logistics operations, which are one of its strengths. Harnessing the ultra-low temperature technology at which it excels and the business models of its diverse businesses, the Air Water Group aims to create new added value logistics. Air Water will also consider the possibility of M&A activities to acquire logistics companies which have business domains or features it lacks to accelerate business expansion into growing domains.

## Air Water makes Logistics Business into a new independent Company

Under the concept that the means to harness logistics will control business from now on—in other words, logistics is the key to business success—the Air Water Group established a new Logistics Company in April 2017.

To build the foundations for community-based logistics, the Logistics Company will establish business sites in eight locations throughout Japan over the coming four years, aiming for net sales of 100 billion yen in FY2020.

## Future direction of the Logistics Company Integration of the Group's logistics operations

The aim of integration is not simply to bring operations in-house but also to achieve greater business efficiency and resilience through centralized control of all the Group's logistics operations. Air Water sees logistics as the flow of goods in purchasing, manufacturing and sales operations respectively and, by strategically reviewing logistics, it aims to achieve true logistics that makes effective use of resources both inside and outside the Group.

To achieve true logistics, the Logistics Company will take on the huge challenge of creating synergy through total optimization of Group logistics, visualizing flows of goods and people until they reach the sales offices of Group companies, and gaining an understanding of logistics costs that are not readily apparent.

## Creating new Air Water-style logistics businesses

Logistics using the ultra-low temperature technology which forms the basis of the Industrial Gas Business can be described as one of the Air Water Group's strengths. For example, a responsibility structure covering everything from the development and manufacture of tanks trucks for the transportation of liquefied gases and liquefied gas pumps to security and stable supply is also a feature of the Air Water Group. Air Water's application of its ultra-low temperature technology in extensive food products logistics operations centering on Hokkaido and Tohoku and the transportation of raw blood plasma can also be described as the culmination of many years of effort.

It is important that Air Water continues drawing on these strengths in the future to further refine its low-temperature logistics operations. More specifically, Air Water will collaborate with Group companies to create high added value logistics, including considering the possibility of M&A to create a cold chain and establishing a distinctive logistics structure in each region.

## Business Overview and Features of Business

Supplying gases such as oxygen and nitrogen, Air Water's industrial gas and medical gas businesses, which date back to its founding, are an important part of the social infrastructure. Air Water assumes the heavy responsibility of providing an uninterrupted, stable and safe supply of these high-pressure gases. The quality of Air Water's logistics operations has been built up over a long history of ensuring the absolute safety and stability of supply in this way. And today, Air Water has expanded its business domains to become a comprehensive logistics service provider, offering not only high-pressure gas transport services but also general cargo transport, container transport, medical logistics and even 3PL such as food logistics. Air Water is also actively involved in the business of designing and mounting truck bodies, an area where it demonstrates its business ethos of fully meeting customers' needs.

## Main Business Domains

### Transport



Air Water provides high quality services through the use of trucks, containers, etc. in the general cargo segment and through the utilization of low-temperature transport technologies and unique expertise in the specialist transport segment, including industrial gas transport, food logistics and medical logistics.

### 3PL



3PL stands for Third-Party Logistics. Air Water provides efficient and high added-value logistics services covering everything from restructuring to management of shippers' logistics operations.

### Vehicle Bodies



The Air Water Group meets customers' vehicle body needs through integrated production systems spanning the design and production of various truck bodies and trailers and tank trucks to specialty vehicles, and spanning the processing of materials to the production of finished products.

## The Group's Nationwide Distribution Network

(As of March 31, 2017)



## TOPICS

### Hokkaido Body Co., Ltd.

In April 2011, Air Water welcomed Hokkaido Body Co., Ltd. (Kitahiroshima City, Hokkaido) to the Group, laying the foundations for further expansion of Air Water's logistics business. Since then, Air Water has expanded the Group's business domains through Hokkaido Body's mounting business, including bringing the production of vehicles for the Group logistics operations in-house and developing vehicles in collaboration with each Operating Company. Then, thanks to the recent growth in manufacturing contracts for trailer bodies and steady progress with in-house manufacturing of vehicles, Hokkaido Body began to receive requests far beyond the vehicle manufacturing capacity of its manufacturing plant.

In light of this situation, Hokkaido Body purchased a plot of land for future use nearby in FY2016. It also sought to increase manufacturing capacity and improve production efficiency by partially extending the manufacturing plant and upgrading the production line, thereby keeping its business on the growth track.

In the future, Hokkaido Body plans to proceed with the construction of a new plant. It will also seek to improve cost competitiveness, further strengthen Air Water's unique business model which meets customers' needs starting with vehicle manufacturing, and play its part in the Group's logistics operations by manufacturing vehicles.







# Seawater and Aerosol Businesses

## Seawater

### Salt and Food Products



Nihonkaisui, Co., Ltd., the leading producer of salt in Japan, provides a stable supply of high quality salt products to regions throughout Japan from its Ako and Sanuki plants. It is also involved in the agriculture and food products business.

### Magnesia



Tateho Chemical Industries Co., Ltd., an international magnesia brand, produces magnesia products that have seawater-derived bittern and mineral magnesium as their primary ingredients. It produces ceramic products and supplies these products to a wide range of industries, in particular, it distributes magnesia for high-grade electromagnetic steel sheets that are indispensable for the electricity infrastructure.

### Environment



The Air Water Group is also utilizing seawater resources and technologies to expand a wide range of business areas, in particular environmental products, such as adsorbent for water and soil treatment, and magnesium hydroxide, and the sewer pipe reclamation business.

### Synergy



## Aerosol



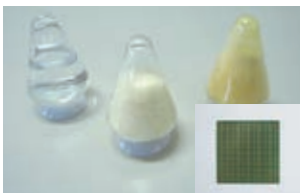
Via OEM and under its own brand, the Air Water Group supplies a diverse range of aerosol products based on gas control technology, including everything from coating materials and automotive parts to cosmetics and household commodities.

**The “rodents” supporting Air Water’s diverse businesses**  
 These businesses underpin the “Order Rodentia Style of Business.” They support Group growth through one-of-kind technology or distinctive products, and include salt and magnesia produced from the elements of seawater, the aerosol business based on gas control technology, as well as O-rings, ECOROCA® (artificial recycled wood), and NV (metal surface treatment). Businesses such as the SiC, electric power and overseas businesses are also strategic attempts to accurately grasp trends and create businesses for sustainable growth.



## Other Businesses

### Electronic Materials



Leveraging its global network, Air Water offers a diverse lineup of distinctive electronic materials and delivers various types of products customized to meet customer requirements.

### BELLPEARL



The Air Water Group has developed Bellpearl®, the functional resin, and Bellswing®, a PSA type nitrogen gas generator which uses the functional new carbon Bellfine® as an adsorbent, and sells them both in Japan and overseas.

### O-rings



The Air Water Group manufactures and sells all types of seals such as rubber O-rings and rubber products for industrial use. It offers a lineup of its own finished products for various industrial fields, including Pororoca ultrahigh-performance rubber O-rings for semiconductors and LCD manufacturing systems.

### ECOROCA



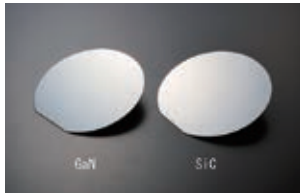
The Air Water Group manufactures and sells ECOROCA®, a new compound, recycled material made from used wood and plastic. Delivering excellent strength and safety while maintaining the texture of the wood, ECOROCA® is used as decking material, louver material and wall material.

### NV (metal surface treatment)



The Air Water Group provides unique metal surface solutions such as NV nitriding, which provides high-quality surface treatment for steel materials, and Pionite, which increases the hardness of stainless steel without compromising corrosion resistance.

### SiC



Air Water has developed its own SiC substrate for products such as power semiconductors and super luminosity LEDs, and began supplying substrates to domestic and international customers. Air Water successfully established a technology for large-diameter substrates of up to 8 inches and mass produced the substrates as the most suitable for the growth of GaN (gallium nitride).

### Electric Power



Industrial gas manufacturing processes require vast amounts of electricity. The Air Water Group is promoting the electric power business, judging it necessary to secure baseload power to be able to procure electric power by itself. Harnessing the knowhow, experience and other management resources built up in its Industrial Gas and Energy Businesses, Air Water is expanding energy business suited to each region by means of electricity generation from renewable sources, in principle.



### Overseas Business Expansion

In its overseas operations, the Air Water Group has more than 30 business sites overseas, mainly in China and Southeast Asia. As in Japan, its overseas business operations are becoming increasingly diverse, and besides the industrial gas business, now include chemicals, medical, metal surface treatment and magnesia businesses. The Air Water Group acquired Taylor-Wharton Malaysia Sdn.Bhd., which manufactures low-temperature equipment, in FY2015 in the Industrial Gas Business and Singapore-based GLOBALWIDE, which designs and installs operating rooms in FY2017 in the Medical Business, and the Group aims to expand business, with these companies positioned as core business sites in Southeast Asia. The Group is also considering the possibility of expanding business overseas as a pillar of growth from 2020 and it has made a start on market research and the exploration of deals in a wide range of areas, including the industrial sector and the medical, agricultural and food products sectors.



Example of a hospital interior installed by GLOBALWIDE (Singapore).



## Research and Development

Air Water has developed unique technologies in diverse business sectors, ranging from industrial gas technology related to all kinds of manufacturing to technology related to electronic materials, fine chemicals, healthcare, energy, cultivation techniques and food products. Leveraging its advanced technologies in these businesses, Air Water works day in, day out on research activities aimed at creating unique new technologies and original products through synergistic effects produced by fusing technologies across business segments.

## New structure with greater flexibility to meet diversifying R&D needs

### Shift from Company-based R&D to R&D based on four areas of technology

In April 2017, Air Water established a new structure which puts the Research and Development Institute under the control of the newly established President's Office. Air Water shifted from Company-based R&D to R&D based on area of technology to give it greater flexibility to meet increasingly diverse R&D needs arising from business expansion in recent years. The new organization and the main focuses of R&D activities are as follows.

#### Process Development

Industrial gas technology, including cryogenic air separation units and PSA

#### Gas Applications

Gas applications including atmospheric pressure plasma surface treatment technology and dry ice snow precision cleaning technology

#### Equipment Development

Industrial equipment, including the fuel gas generator for welding V-AQUAGAS and LNG pumps

#### Numerical Analysis

Simulator-based design and development necessary for development processes of all R&D operations

The development of appealing products and services that meet customer needs requires the combination of multiple individual business areas, for example, Gas combined with Healthcare, or Gas combined with Agriculture. The new system will meet such needs. Air Water will contribute to the realization of an affluent society through products and services produced based on innovative ideas and sophisticated technology development capabilities.

### R&D Topics (1) New carburizing gas

The newly developed carburizing gas is a heat treatment gas with a ratio of 1:1 between CO and H<sub>2</sub>, which is suited to the carburizing atmosphere. Air Water's unique CH<sub>4</sub> (methane) modification technology is used to achieve continuous and stable generation of a gas with a higher CO<sub>2</sub> concentration than conventional atmospheric gas.

In an effort to speed up the carburizing process, the carburizing gas is supplied after removal of CO<sub>2</sub> and water, which adversely affect heat treatment. Consequently, the volume of gas added for atmosphere adjustment is small, reducing the generation of soot that lowers the quality of product appearance. Supplied in the form of compressed gas using gas cylinder bundles, this carburizing gas requires little maintenance after introduction and can also be used as a backup for conventional atmosphere gas.

Air Water is currently proposing a process for shortening carburizing time using this carburizing gas and is in the process of conducting PoC testing carburizing furnaces belonging to customers. According to results obtained so far, this carburizing gas has the effect of shortening carburizing time by 30% and is expected to be used as a means of increasing the efficiency of the heat treatment process and saving energy.

As an industrial gas manufacturer, Air Water will contribute to its customers through the supply of nitrogen and hydrogen gases which are essential for the heat treatment process and also through the supply of gases in general.



New carburizing gas cylinder bundle

### R&D Topics (2) LNG Pumps

Air Water's unique VCP Series of vertical centrifugal liquefied gas pumps have a longer operating life compared to conventional pumps, a compact and lightweight design, are low noise and leak-free, and deliver maintenance efficiency and they are already being used in plants, trucks and other applications. The VCP Series has now acquired explosion proof certification, which is required by the market as a result of rising demand for LNG applications, as well as ship classification certification from the Nippon Kaiji Kyokai. By offering a lineup of products certified to standards, Air Water will meet the needs of customers in an even wider range of applications. By combining LNG pumps with existing LNG products such as LNG satellites and LNG tank trucks, Air Water will continue expanding the LNG business.



Vertical centrifugal pump

### Exhibition of gas application product at Sakai Technology Center

In its R&D initiatives, Air Water puts effort into the development of products and technologies required by the market and the practical application of its R&D results. In July 2017, Air Water put a gas application product, which was practically applied after much R&D and is now being used by many customers, on show at the Sakai Technology Center, the showroom attached to the Sakai Institute.

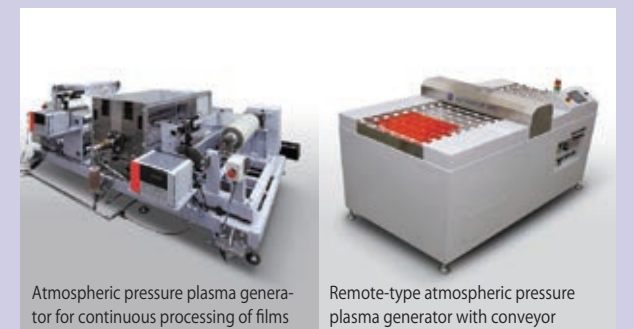


Snow jet

#### Dry Ice Snow Precision Cleaning System "QuickSnow"

The Quicksnow system creates dry ice fine particles from liquid carbon dioxide and has them collide with a target cleaning object at high speed so as to remove organic substances and particles on the precision components and the surface of substrates. The system uses the property of dry ice, which, on impact, vaporizes and increases in volume, to achieve a unique cleaning process.

**Both these products solve problems faced by customers and contribute to improvements in quality and productivity, and help increase business efficiency. Gas application products such as these also help new customers learn more about Air Water.**



Atmospheric pressure plasma generator for continuous processing of films

Remote-type atmospheric pressure plasma generator with conveyor

#### Atmospheric pressure plasma surface modification and cleaning equipment

Air Water established technology that realizes stable generation of plasmas under an atmospheric pressure, rather than in a vacuum process that is essential for a conventional plasma generation. This technology is being used in applications such as surface modification of films and resins, cleaning of liquid crystal glass, silicon wafers and electronic components, and hydrophilic and water repelling treatment of substrates.

# Corporate Governance

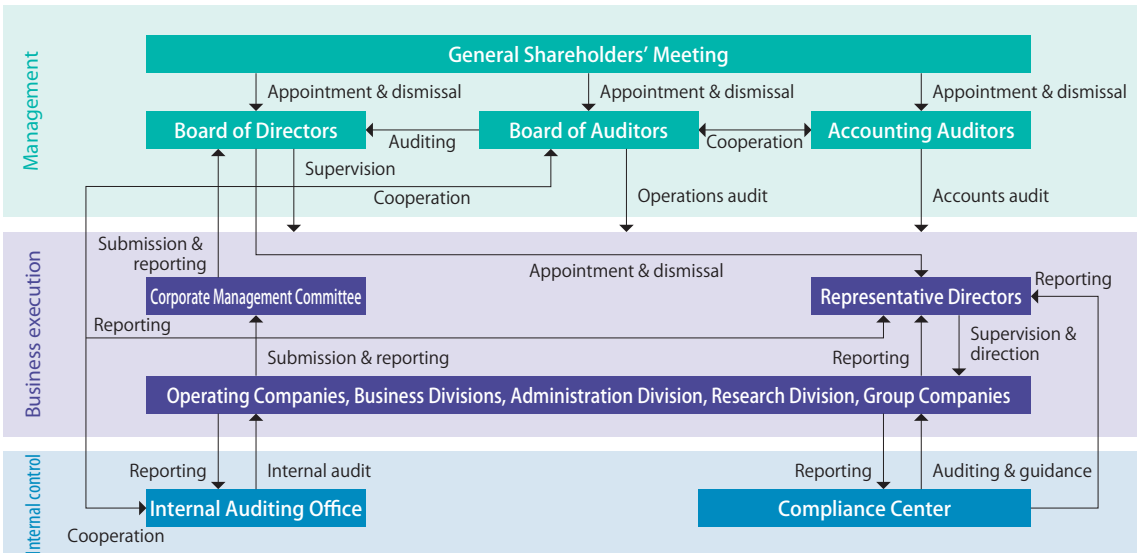
The Air Water Inc. management structure has a Board of Auditors that enables the appropriate supervision and monitoring of each Director's performance of duties. Together with the Board of Directors, the Board of Auditors ensures that each Director's decision-making actions are properly performed and that respective duties are swiftly carried out. Additionally, two independent external directors are appointed to secure a highly effective management supervising function.

## Basic Stance towards Corporate Governance

Air Water Inc. believes that practicing fair corporate activities in accordance with good social sense and being trusted by all stakeholders, including shareholders, customers, local communities and employees, are the most critical elements for the sustainable development of a company and creation of corporate value. The Company is aware that enhancing corporate governance and the internal control system are the most important management priorities for obtaining stakeholder trust and fulfilling its corporate social responsibilities.

Air Water Inc. seeks to enhance corporate governance by establishing a management structure that upholds accurate management decision-making functions, and ensuring appropriate and swift execution of duties based on such decision-making and the supervision and monitoring thereof while simultaneously securing transparent management through broad information disclosure.

### Corporate Governance Framework



## Approach to Overall Balance, Diversity and Scale of the Board of Directors

In accordance with the Articles of Incorporation, the Board of Directors is limited to 20 persons or less. Presently, the total number of members is 20, with two members being independent external directors including one woman.

The Company strives to maintain an ideal Board of Directors, with overall balance and diversity. This is done by comprehensively taking into consideration the right people with the experience, capabilities, and accurate and swift decision-making skills required for the Company's various functions and business areas. Several directors, both those well versed in the operations of Air Water Inc. and external directors from independent companies who possess abundant experience and knowledge from elsewhere, are appointed.

## Policy Concerning Constructive Dialogue with Shareholders

To achieve sustainable growth and the medium- to long-term enhancement of corporate value, Air Water Inc. understands that building long-term relationships of trust with shareholders and

investors through the timely and impartial release of accurate information concerning its operations, finances, etc., as well as constructive dialogue, are absolutely essential.

The Executive Officer in charge of IR oversees communications with shareholders and investors, and also facilitates organic collaboration between relevant company departments to ensure appropriate information sharing and establish opportunities for dialogue with management. In addition to the General Meeting of Shareholders, the Company also holds an annual financial results briefing in which the President & CEO participates. Additionally, on the day of the quarterly financial report, a phone conference is held with analysts and institutional investors. Air Water Inc. also holds events, such as factory tours and small meetings, and organizes visits to overseas institutional investors. Through the various dialogues with shareholders and investors, the Company gathers opinions and concerns related to its management processes, etc. and reports these to the CEO and management team as necessary. Careful consideration is given to measures for preventing the leakage of insider information when speaking with shareholders and investors.

## Message from External Director

External Director, Air Water Inc.  
Employment and Welfare Consultant  
**Yukiko Sakamoto**

After joining the Ministry of Labor (now part of Ministry of Health, Labor and Welfare), Ms. Sakamoto held various posts including vice-governor of Shizuoka Prefecture, head of the Tokyo Labor Bureau, and head of the Human Resource Development Bureau. After serving as a member of the House of Councillors, Mr. Sakamoto began working as an employment and welfare consultant in July 2009. She became an External Director of Air Water Inc. in June 2014.



The Air Water Groups aims for enhancement of its corporate value in the medium and long term. External Director Yukiko Sakamoto shares her views on Air Water's corporate culture, the current status of management activities and on her expectations for the future.

### What kind of company is Air Water?

There is increasing acceptance of diversity in the workplace.

Air Water used the Industrial Gas Business and its strengths in this area to expand into various other areas. However, in my view, the company does not content itself with its existing business but rather adopts a style of management that demonstrates flexibility to adapt to a changing society and a sense of urgency.

Both male and female employees put all their effort into their work. Many companies have joined the Group through M&A, but we do not force our culture on them. Rather, there is a strong sense of wanting to develop with them as new colleagues.

Management's willingness to become involved in new business and to then use this as momentum to take on even greater challenges is precisely what will drive the company's continued development, and I believe we have created a corporate culture in which diversity is accepted.

### Is there anything that you try to achieve in discussions at board meetings?

I try to understand the whole picture by visiting as many actual workplaces as possible, to ensure that discussions are multifaceted and that there is a high level of transparency.

The Group has many businesses, making it impossible to visit them all, but whenever I have the opportunity I visit a worksite and listen to what everyone has to say. I think that these visits give me a more accurate understanding of issues raised at board meetings.

Reference materials for boards meetings are distributed ahead of meetings and board members are given detailed explanations by those in charge to enable them to examine proposals properly.

Directors also actively exchange opinions with Auditors at board meetings.

I try to examine every proposal from multiple perspectives, taking all this information into consideration, and to make an appropriate forward-looking judgment in the interests of the continued development of the Air Water Group.

### What do you hope for most, now, as External Director?

The creation of a workplace culture that puts the development of human resources first and aims for the active participation of all employees.

Air Water has begun creating an environment which puts HR development first, aiming to realize the active participation of all employees so that all employees can continue working to their full potential. In particular, Air Water is implementing a raft of measures focusing on broadening the scope of work done by female employees and allowing them to experience work that carries more responsibility, conveying to young employees the appeal of working for the Air Water Group, and supporting their career development.

Air Water Group employees are very positive, feel proud of their company and are eager to develop their own skills. To ensure employees can continue working actively, it is important to assess the individual needs of diverse employees and the positions they are in, to given them equal opportunities and to support their growth. I hope that this idea of creating a new workplace culture at business sites will be boldly put into practice to achieve the active participation of all employees.



# ESG: Contributing to the Environment and Society

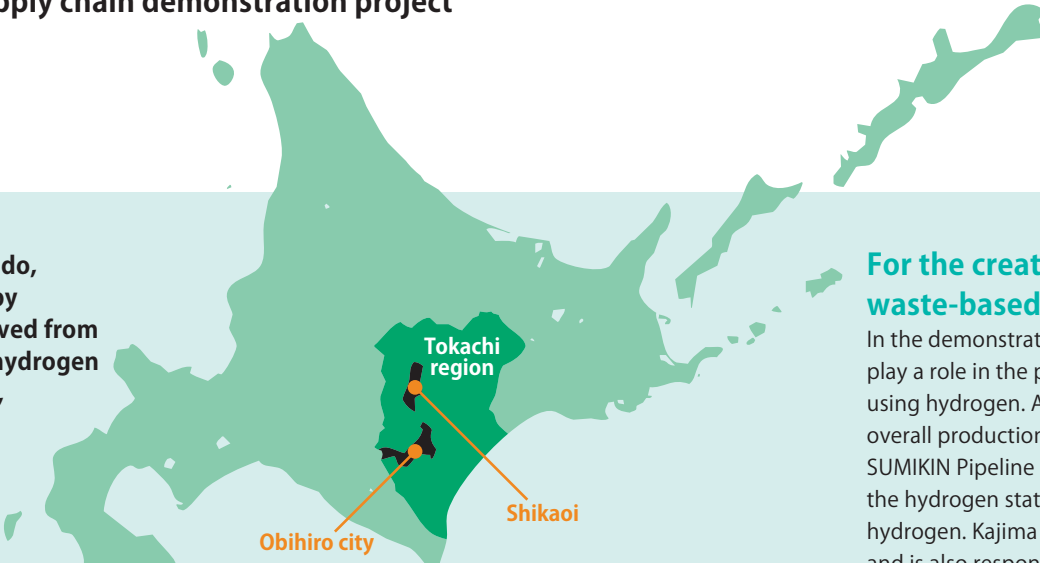
Shikaoi Hydrogen Farm®

Start of livestock biomass waste-based hydrogen supply chain demonstration project

In Shikaoi, a town located in the Tokachi region of Hokkaido, Air Water is working on a demonstration project backed by the Ministry of the Environment and using hydrogen derived from livestock waste. The project aims to create a low-carbon hydrogen society by creating mechanisms for hydrogen generation, transportation and use.

## Demonstration project commissioned by the Ministry of the Environment

On January 24, 2017 Shikaoi Hydrogen Farm®, a hydrogen production facility opened in Shikaoi, Kato District, Tokachi, Hokkaido, a cold region where agricultural land is covered with snow in winter, and a demonstration project for a hydrogen supply chain using hydrogen derived from livestock waste was launched. The facility was established inside Shikaoi Environmental Conservation Center, one of Japan's largest recycling-based biogas plants, which aims to establish environmentally friendly recycling-based agriculture through the effective use of biomass.



The demonstration project was adopted as a Regional Coordination and Low-carbon Hydrogen Technology Verification Project backed by the Ministry of the Environment and it will last up to five years from FY2015 to FY2019. Based on technology, experience and knowledge built up in the hydrogen gas business and leveraging its strong community links in Hokkaido, Air Water is conducting the project as the representative enterprise in collaboration with Kajima Corporation, NIPPON STEEL & SUMIKIN Pipeline & Engineering Co. Ltd. and Air Products and Chemicals, Inc.

## For the creation of a livestock biomass waste-based hydrogen supply chain

In the demonstration project, participating enterprises each play a role in the process of generating, transporting and then using hydrogen. Air Water is responsible for overseeing the overall production process and transportation, and STEEL & SUMIKIN Pipeline & Engineering is primarily responsible for the hydrogen stations which are the infrastructure for using hydrogen. Kajima Corporation oversees the process of use, and is also responsible for demonstrating the use of fuel cells, fuel-cell vehicles (FCVs) and fuel-cell forklifts. Air Products and Chemicals, Inc. is involved in the supply of biogas refining separation membranes and the demonstration of technology.

This is the first time that production and use of hydrogen derived from livestock waste has been attempted in Japan and it is a new hydrogen energy model that is still in the research and development phase. In this demonstration project, it was initially assumed that a hydrogen energy supply chain spanning production to use would be created by combining individual elemental technologies that were already established. However, when the equipment was actually put into operation, even though the equipment had been designed with due consideration of the harsh winter environment of Tokachi, which is a cold region, various unforeseen situations arose. These situations were resolved one by one in the course of trial operation and, after many equipment improvements, the project moved onto the demonstration operation phase.

In April, verification of the design in relation to seasonal variation began through operation of the equipment all year round. There are also plans to examine the commercialization of a local hydrogen energy production and consumption model in cold regions where agricultural land is covered with snow in winter and to verify its effectiveness in reducing CO<sub>2</sub> in the future.

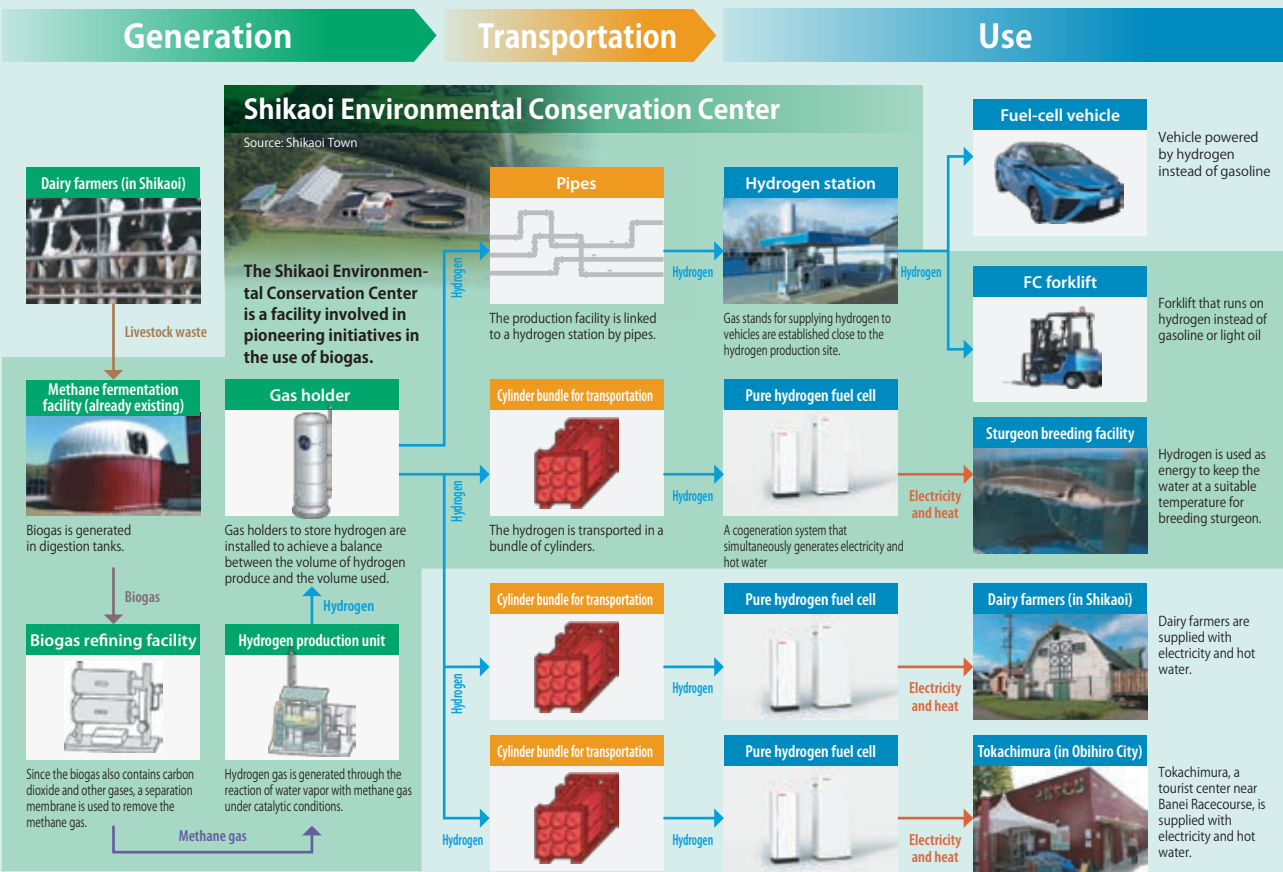
## Pursuing a low-carbon, local hydrogen energy production and consumption model

Broadly speaking, the project flow consists of the supply of biogas from the Shikaoi Environmental Conservation Center and the production of hydrogen. The produced hydrogen is used as energy for fuel cells and in a sturgeon breeding facility inside the center. It is also transported in cylinder bundles to local dairy farmers and to the Tokachimura tourist center in Obihiro City, where it is used to supply electricity and hot water. The hydrogen is also supplied as fuel for fuel-cell vehicles and fuel-cell forklifts via Hokkaido's first hydrogen station located within the center.

From the start of full-scale demonstration, it was possible to actually see a low-carbon, disaster-resistant local energy production and consumption model in action, with hydrogen derived from livestock waste collected from farmers in the region being used inside the region. Currently, Air Water is actively promoting activities to deepen understanding among stakeholders by getting them to see the supply chain in action.

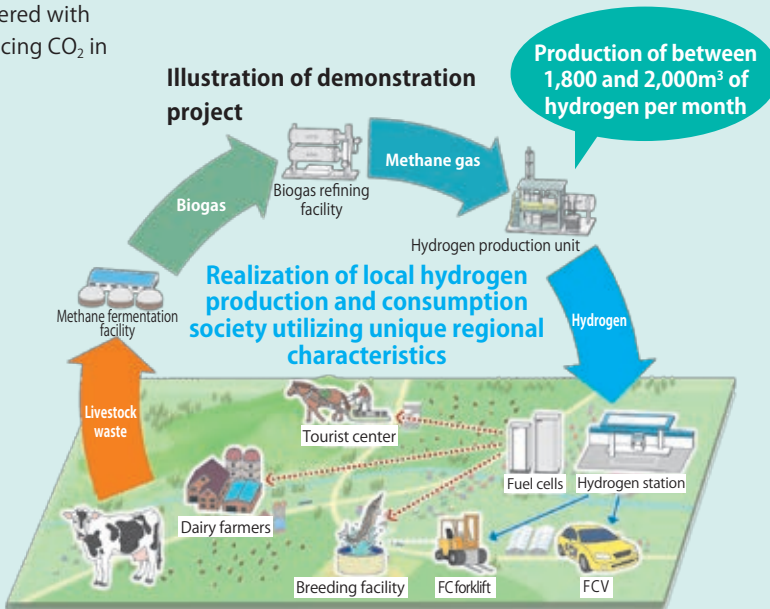
In the future, Air Water would like to explore other possibilities besides FCVs to meet the needs of the local community, such as fuel-cell tractors and fuel-cell trucks that would be indispensable in agricultural regions. It would also like to link this to suggestions on how to use hydrogen effectively. Through ongoing collaboration with local communities in this way, Air Water is actively contributing to the realization of a low carbon, local hydrogen energy production and consumption society.

## Joint demonstration project conducted inside Shikaoi Environmental Conservation Center, one of Japan's largest recycling-based biogas plants



Shikaoi Hydrogen Farm

## Illustration of demonstration project





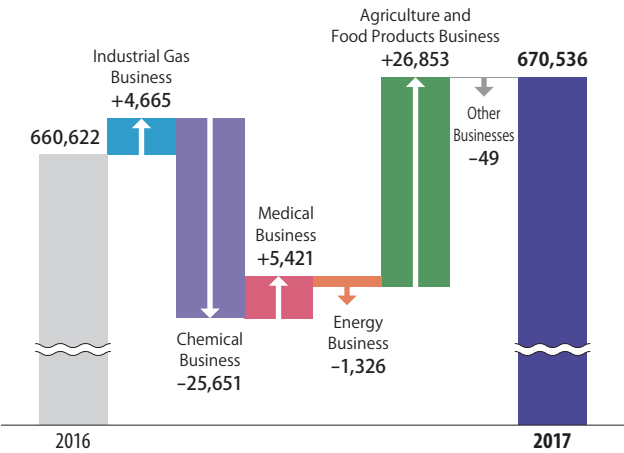
# Financial Data (10-Year)

Air Water Inc. and Consolidated Subsidiaries  
For the years ended March 31

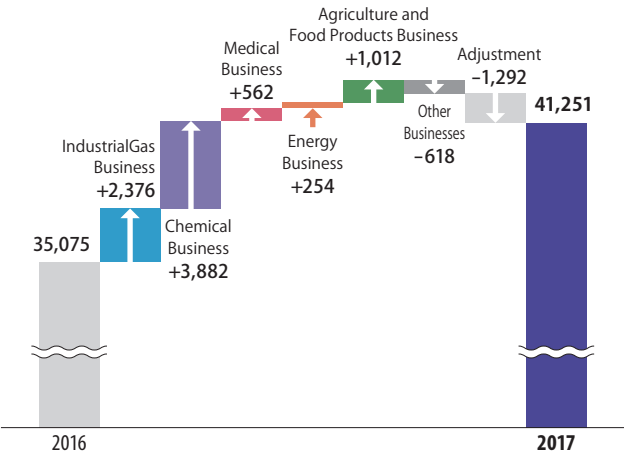
										Millions of yen	Thousands of U.S. dollars*	Change (%)
For the years ended March 31	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2017	2017/2016
Net sales	426,226	448,772	426,357	471,809	492,679	540,016	641,256	660,541	660,622	670,536	5,976,789	1.5
Operating income	25,578	25,779	28,202	31,268	31,672	27,897	35,078	36,126	39,524	41,341	368,500	4.6
Ordinary income	27,710	27,873	29,020	32,958	33,601	35,155	36,281	38,159	35,075	41,251	367,689	17.6
Profit attributable to owners of parent	14,502	12,680	13,916	11,680	17,167	18,365	19,225	20,702	20,139	22,337	199,109	10.9
Capital expenditures	26,761	35,493	25,356	33,820	22,843	34,110	32,348	32,028	42,236	40,587	361,770	-3.9
Allowances for depreciation	13,521	14,295	17,044	19,423	20,373	22,058	24,337	25,222	26,620	25,524	227,516	-4.1
Cash flows from operating activities	21,664	27,884	44,592	32,576	39,661	30,057	48,248	51,071	43,512	58,873	524,762	35.3
Cash flows from investing activities	(36,033)	(39,999)	(25,820)	(34,766)	(28,695)	(42,501)	(52,186)	(35,483)	(40,647)	(44,357)	(395,374)	9.1
Cash flows from financing activities	9,800	22,784	(20,615)	(1,591)	(7,611)	10,253	4,620	(7,940)	(8,115)	(8,553)	(76,237)	5.4
Free cash flow	(14,369)	(12,115)	18,772	(2,190)	10,966	(12,444)	(3,938)	15,588	2,865	14,516	129,388	406.7
As of March 31												
Total assets	353,399	385,563	392,758	407,639	430,547	484,328	528,092	547,642	575,832	629,115	5,607,594	9.3
Interest-bearing debt	147,894	135,069	114,787	122,317	119,358	141,295	155,479	154,864	157,795	172,403	1,536,706	9.3
Shareholders' equity	127,567	132,327	153,140	157,636	170,448	185,599	203,500	226,375	234,726	255,984	2,281,701	9.1
Per share information										Yen	U.S. dollars	
Net income (EPS, yen)	79.29	68.56	73.64	61.24	89.35	94.04	98.32	105.75	102.73	114.53	1.03	11.5
Net assets (BPS, yen)	689.41	715.60	789.89	822.05	873.78	949.63	1,040.22	1,155.80	1,196.92	1,312.55	11.70	9.7
Dividend (DPS, yen)	22	22	22	22	22	24	26	28	28	34	0.30	21.4
Key indicators												
Ordinary income ratio (%)	6.5	6.2	6.8	7.0	6.8	6.5	5.7	5.8	5.3	6.2		
Return on assets (ROA,%)	8.1	7.5	7.5	8.2	8.0	7.7	7.2	7.1	6.2	6.8		
Return on equity (ROE,%)	12.2	9.8	9.7	7.5	10.5	10.3	9.9	9.6	8.7	9.1		
Equity ratio (%)	36.1	34.3	39.0	38.7	39.6	38.3	38.5	41.3	40.8	40.7		
Net D/E ratio	1.06	0.86	0.60	0.66	0.57	0.65	0.66	0.58	0.57	0.55		
Payout ratio (%)	27.7	32.1	29.9	35.9	24.6	25.5	26.4	26.5	27.3	29.7		
Non-financial information												
Number of employees at end of the year (consolidated basis)	7,397	7,603	7,925	8,237	8,062	8,937	9,557	10,147	11,334	12,580		
Number of consolidated subsidiaries	68	66	62	65	65	68	75	81	85	101		

\*Calculated using the prevailing exchange rate at March 31, 2017, which was 112.19 yen to U.S. 1.00 dollar.

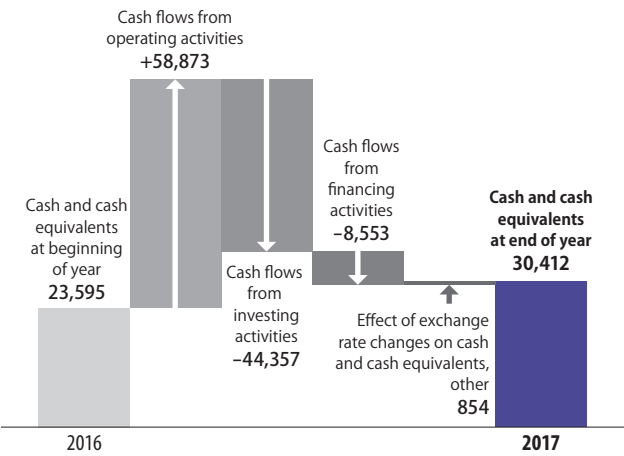
## Sales Analysis (million yen)



## Ordinary Income Analysis (million yen)



## Cash Flow Analysis (million yen)





# Timeline of “Value Creation” to Enrich Society

Air Water Inc. was established in 2000 through the consolidation of three companies—Hoxan Corporation, Daido Sanso Co., Ltd. and Kyodo Oxygen Co., Ltd.—each with different histories and cultures, to begin a new mission and cause: to provide services that innovate industry and society through “air and water.” Since then, the new company has conducted aggressive M&A activities to reinforce its business foundation, expand its business areas, and improve the comprehensive strength of the Group. Air Water will continue taking on businesses that are ahead of their time, in keeping with the spirit of its founder, which has been continuously handed down.

## ● Hoxan

1929



**Hokkaido Sanso Co., Ltd. is established (Company renamed Hoxan Corporation in 1966)**

Aiming to save lives and help develop local industries: In the years before the war, only one company was capable of supplying oxygen for medical use in central Hokkaido. Poor transportation conditions and the inability to receive sufficient oxygen inhalation led to the death of one sick person. This person's elder brother, the head of the Chamber of Commerce and Industry of Sapporo City at the time, developed the grand vision of supplying oxygen to save lives and develop Hokkaido's industries, and founded Hokkaido Sanso Co., Ltd.

1929



**Operation of 30m³/h oxygen production machinery begins.**

Hokkaido Sanso began sales of LPG for household use in an effort to improve the lifestyles of people who used wood and coal for cooking. Later, it developed Japan's first prefabricated bathroom unit, Hoxan Bath-All. At a time when the majority of Japanese people still used public bathhouses, the product captured the imagination: “The bath came to my home!”

1955



**Begins sales of LPG.**

“Is it possible to make effective use of nitrogen, a by-product of oxygen production?” This idea led to the instant freezing of agricultural and fisheries products from Hokkaido using liquid nitrogen at a temperature of -196°C. Agricultural/food operations that started with gas would become a growth business covering all areas from growing to processing and retail sales.

1963



**Production and sales of Bath-All prefabricated bath units begins**

Propane gas-fueled Olympic torch lit at the Sapporo Winter Olympic Games

1981




**Production and sales of frozen foods begins.**

DAIDO Hoxan Inc. is established.

## ● Daido Sanso

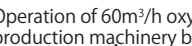
1933



**Daido Sanso Co., Ltd. is established.**

Founded in the spirit of a united front and collaboration: Oxygen and acetylene used for the welding and cutting of iron materials were preferentially distributed to the military industry, and difficult to obtain for smaller businesses. And so it was decided to change the situation. Rather than purchasing the gas, those who use it joined hands to produce oxygen themselves. Established in Osaka, when the city was even livelier than Tokyo, Daido Sanso was recognized for its unconventional corporate stance.

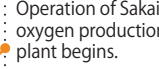
1933



**Operation of 60m³/h oxygen production machinery begins.**

In order to respond to demand for the mass production and transportation of oxygen, the idea emerged of liquefying oxygen. Liquid oxygen can be reduced to 1/800 the volume of the gas form. Although massive investment was required for facilities and technologies, Daido Sanso made the bold decision to switch, which enabled it to supply the gas to rapidly expanding shipyards and ironworks.

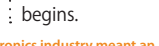
1954



**Operation of Sakai liquid oxygen production plant begins.**

The rapid growth of the electronics industry meant an increase in demand for high-purity nitrogen required for semiconductor production. Daido Sanso developed a unique plant system in which cryogenic nitrogen as a product is used for cooling air as a raw material. The invention was welcomed as an optimal gas supply system applying a technology that defied industry convention.


1970



**Onsite supply for chemical manufacturers begins.**

V1 high-purity nitrogen gas generator is developed.

1983




**Invests in Tateho Chemical Industries Co., Ltd.**

1988

## ● Kyodo Oxygen

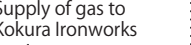
1962



**Kyodo Oxygen Co., Ltd. is established.**

Supporting Japan's rapid economic growth with oxygen: Kyodo Oxygen was established in the midst of the Japanese economic miracle. Sumitomo Metal Industries established Kyodo Oxygen inside its Wakayama Ironworks to meet rapidly increasing steel demand fueled by the remarkable development of heavy industry, and the supply of oxygen for converter steelmaking began.


1962



**Supply of gas to Kokura Ironworks begins.**

Production and sales of ELNACKS welding argon begins.

1978



**The Company developed an original method of extracting a high-purity mixture of argon and oxygen from a cryogenic air separation system. No need to mix afterwards meant that the method was more economical. The gas is also homogeneous and stable in quality, boasting high performance. It is used during the welding processes of construction machinery and in automobile manufacturing.**

1929

2000  
Air Water Inc.  
is established.

2000

## 2001

- Acquires 100% shares of Mitsui Chemicals Praxair. (Air Water Carbonic Inc. since 2005)
- Acquires hydrogen gas business. (Air Water Hydro since 2007)

## 2002

- Snow Brand Food's Hokkaido Plant, which manufactured ham and sausages, is acquired, and Saver SS Inc. is established.
- Chemicals business centered around coal chemicals is acquired.



## 2004

- A joint venture with Kobe Steel, Shinko Air Water Cryoplant Ltd., is established.
- VSU, a small high-efficiency air separator system, is developed and goes into operation in Niigata.



## 2005

- The Bellpearl functional particulate phenolic resin business is acquired and Air Water Bellpearl Inc. is established.
- Kawaju Bosai Kogyo Co., Ltd., which offers medical system installations and other services (Air Water Safety Service Inc. since 2006), is acquired.



## 2007

- Nihonkaisui Co., Ltd. is acquired and the Seawater business, including Tateho Chemical Industries Co., Ltd., is established.

## 2008

- Inoue Co., Ltd., an electronic materials trading company (Air Water Materials Inc. since 2015), is acquired.

## 2009

- Air Water Farm, an agricultural production corporation, is established, and a 7ha glass greenhouse utilizing solar is opened in Chitose City, Hokkaido.



## 2010

- The Next-2020 Ver.1 Medium-term Management plan is formulated with the aim of achieving net sales of 1 trillion yen in FY2020.

## 2011

- A capital and business tie-up agreement is made with Kanto Natural Gas Development Co., Ltd. (K&O Energy Group since 2014)



## 2012

- Tomichi Co., Ltd., a distributor and processor of fruit and vegetables, is acquired.
- Gold Pack Co., Ltd., a manufacturer of fruit and vegetable beverages, is acquired.

## 2013

- Air Water Medical Inc. is established to provide home care services.



## 2014

- VSUA, a small high-efficiency air separation system that can also produce argon, goes into operation at Air Water Vietnam.



## 2015

- Operation of biomass power generation facility at Nihonkaisui's Ako Plant begins.
- Kawasaki Kasei Chemicals Ltd., a manufacturer and distributor of quinine-based products, is acquired.
- KYUSUYUA Co., Ltd., Japan's largest fruit and vegetable retailer, is acquired.



## 2016

- Daisen Ham Co., Ltd. and Plecia Co., Ltd. are acquired.
- Kawamoto Corporation, which manufactures and sells sanitary materials, is acquired.



2017



# Major Group Companies (As of October 1, 2017)

## Regional Business Companies

Name	Address	Business Activities
Hokkaido Air Water Inc.	2, Kita-Sanjo-Nishi 1-chome, Chuo-ku, Sapporo, 060-0003, Japan	Sale of industrial gas and medical gas, LP gas and kerosene, natural gas, and related equipment
Tohoku Air Water Inc.	4-22, Tsutsujigaoka 2-chome, Miyagino-ku, Sendai, 983-0852, Japan	Sale of industrial gas and medical gas, LP gas and kerosene, natural gas, and related equipment
Kanto Air Water Inc.	18-19, Toranomon 3-chome, Minato-ku, Tokyo, 105-0001, Japan	Sale of industrial gas and medical gas, LP gas and kerosene, natural gas, and related equipment
Koshinetsu Air Water Inc.	3878-1, Azusagawayamato , Matsumoto, Nagano Prefecture, 390-1701, Japan	Sale of industrial gas and medical gas, and related equipment
Chubu Air Water Inc.	132, Oneyama 2-chome, Midori-ku, Nagoya, 459-8007, Japan	Sale of industrial gas and medical gas, LP gas and kerosene, and related equipment
Kinki Air Water Inc.	12-8, Minami-Semba 2-chome, Chuo-ku, Osaka, 542-0081, Japan	Sale of industrial gas and medical gas, LP gas and kerosene, natural gas and related equipment
Chushikoku Air Water Inc.	3-53, Danbaraminami 1-chome, Minami-ku, Hiroshima, 732-0814, Japan	Sale of industrial gas and medical gas, and related equipment
Kyushu Air Water Inc.	13-34, Hakataekihigashi 2-chome, Hakata-ku, Fukuoka, 812-0013, Japan	Sale of industrial gas and medical gas, and related equipment

## Industrial Gas Business

\*Industrial gas includes medical gas in some cases.

Tomakomai Kyodo Oxygen Co., Ltd.	17-18, Yayoicho 1-chome, Tomakomai, Hokkaido, 053-0802, Japan	Manufacture and sale of industrial gas
Kyodo Oxygen Co., Ltd.	1-7, Motowanishicho 1-chome, Muroran, Hokkaido, 050-0065, Japan	Manufacture and sale of liquid nitrogen gas and dry ice
NCSS Air Water, Inc.	14-1, Sotokanda 4-chome, Chiyoda-ku, Tokyo, 101-0021, Japan	Manufacture and sale of industrial gas (including onsite supply)
Air Water Carbonic Inc.	21-3, Shimbashi 4-chome, Minato-ku, Tokyo, 105-0004, Japan	Manufacture and sale of liquid nitrogen gas and dry ice
Air Water Hydrogen Corp.	15-12, Toranomon 1-chome, Minato-ku, Tokyo, 105-0001, Japan	Manufacture, sale, recycling, etc. of industrial hydrogen gas
Nippon Helium Inc.	9-3, Komaoka 2-chome, Tsurumi-ku, Yokohama, 230-0071, Japan	Import and sale of helium
Takenaka Kouatsu, Co., Ltd.	8, Motoshiocho 5-chome, Minami-ku, Nagoya, 457-0823, Japan	Sale of industrial gas
Shinko Air Water Gas, Ltd.	12-8, Minami-Semba 2-chome, Chuo-ku, Osaka, 542-0081, Japan	Sale of industrial gas
Air Water Plant & Engineering, Inc.	6-40, Chikkoshinmachi 2-chome, Nishi-ku, Sakai, Osaka Prefecture, 592-8331, Japan	Design, production, sale and maintenance of various types of gas generation units and gas applications, and LNG-related equipment
Kurio Air, Inc.	4, Chikkohamaderacho, Nishi-ku, Sakai, Osaka Prefecture 592-8351, Japan	Manufacture and sale of industrial gas
Gas Net Inc.	5-9, Kawaramachi 4-chome, Chuo-ku, Osaka, 541-0048, Japan	Sale of gas and solvents
Sakai Gas Center, Inc.	1, Takumichi, Sakai-ku, Sakai, Osaka Prefecture, 590-0908, Japan	Manufacture and sale of industrial gas
Air Water Manufacturing, Inc.	6-40, Chikkoshinmachi 2-chome, Nishi-ku, Sakai, Osaka Prefecture, 592-8331, Japan	Production of industrial gas facilitates and equipment, etc.
Senboku Oxygen, Co., Ltd .	5, Takasago 1-chome, Takaishi, Osaka Prefecture, 592-0001, Japan	Manufacture and sale of industrial gas (including onsite supply)
Air Water Daio Inc.	7-27, Jinaicho 2-chome, Moriguchi, Osaka Prefecture, 570-0056, Japan	Manufacture and sale of gas for electronics industry
Shinko AirTech, Ltd.	3-16, Haradadori 2-chome, Nada-ku, Kobe, 657-0845, Japan	Manufacture and sale of industrial gas (including onsite supply), and sale of nitrogen gas generating units
KOBELCO Air Water Cryoplant, Ltd.	2-7, Iwaya Nakamachi 4-chome, Nada-ku, Kobe, 657-0845, Japan	Design, production and maintenance of deep cold air separating units
Matsuyama Oxygen Inc.	2877, Nishihabumachi, Matsuyama, 791-8044, Japan	Manufacture and sale of industrial gas and LP gas

## Chemical Business

Sun Chemical Co., Ltd.	29-3 Shinmachi, Oaza, Yashio, Saitama Prefecture, 340-0807, Japan	Manufacture and sale of functional chemicals (pharmaceutical intermediates and electronic materials)
C-Chem Co., Ltd.	14-1, Sotokanda 4-chome, Chiyoda-ku, Tokyo, 101-0021, Japan	Manufacture and sale of coal tar distillates, etc.
Kawasaki Kasei Chemicals Ltd.	1310, Omiyacho, Saiwai-ku, Kawasaki, Kanagawa Prefecture, 212-0014, Japan	Manufacture and sale of organic acid products, organic acid derivatives, and quinone-based products
Printec Corporation	1866-3, Sakai, Atsugi, Kanagawa Prefecture, 243-0022, Japan	Manufacture and sale of electronic materials and semiconductor substrates

## Medical Business

Saito Medical Industries Inc.	767-80, Hachisu, Otawara, Tochigi Prefecture, 324-0244, Japan	Manufacture and sale of medical hypodermic needles
Ikiken Co., Ltd.	12-27, Shinsayama 2-chome, Sayama, Saitama Prefecture, 350-1331, Japan	Manufacture and maintenance of medical oxygen concentrators
Air Water Medi H, Co., Ltd.	12-3, Nishi-Gotanda 2-chome, Shinagawa-ku, Tokyo, 140-0031 Japan	Contract sterilization of medical equipment and materials, and SPD solutions and services for medical institutions
Air Water Medical Inc.	12-3, Nishi-Gotanda 2-chome, Shinagawa-ku, Tokyo, 141-0031 Japan	Sale and rental of medical equipment, and maintenance services for medical equipment
Radsafe Technical Service Co., Ltd.	12-19 Nishi-Gotanda 2-chome, Shinagawa-ku, Tokyo, 141-0031, Japan	Design, installation, maintenance and management of radiation protection facilities, and work environment measurement services
MCSERVICE Co., Ltd.	3171-5, Ojima, Oaza, Chikuma, Nagano Prefecture, 387-0013, Japan	Maintenance services for hospital facilities and medical equipment, and contract sterilization services
Miwa Electric Medical Co., Ltd.	25, Gonaka Hanamasa, Ama, Aichi Prefecture, 490-1205, Japan	Construction of operating room and ICU interiors, and manufacture and sale of medical facilities and equipment
Handa Co., Ltd.	11-29, Ekinishihonmachi 2-chome, Kanazawa, Ishikawa Prefecture, 920-0025, Japan	Sale and maintenance of medical equipment and medical materials, and SPD services
Nishimura Kikai Co., Ltd.	330, Sashimoncho, Kawaramachidori-Ebisugawaagaru, Nakagyo-Ku, Kyoto, Kyoto, 604-0903, Japan	Sale and maintenance of circulatory system medical equipment, dialysis systems and equipment, and surgical instruments
Denken-Highdental Co., Ltd.	130, Oyakeishigoricho, Yamashina-ku, Kyoto, Kyoto, 607-8187, Japan	Design, production and sales of dental and medical equipment, laboratory equipment and equipment of electronic applications, and manufacture and sales of dental materials
Seiken Medical Co., Ltd.	1-28, Torikaikami 3-chome, Settsu, Osaka Prefecture, 566-0062, Japan	Operating room interior design services (manufacture, installation, maintenance, sterilization and cleaning of medical equipment)
Air Water Safety Service Inc.	2-16, Takatsukadai 3-chome, Nishi-ku, Kobe, Hyogo Prefecture, 651-2271, Japan	Installation of medical gas pipes, and design, manufacture and sale of ventilators, fire extinguishing units, etc.
Misawa Medical Industry Co., Ltd.	351, Asahimachi, Kasama, Ibaraki Prefecture, 309-1717, Japan	Manufacture and sale of hypodermic needles and other medical equipment
Orion Electric Co., Ltd.	8-24, Sakae 5-chome, Naka-ku, Nagoya, Aichi Prefecture 460-0008, Japan	Wholesale, manufacture and sale of radiation-related medical equipment
Kawamoto Corporation	6-4, Tanimachi, Chuo-ku, Osaka, Osaka, 540-0012, Japan	Manufacture and sale of sanitary materials, medical supplies, etc.
Matsuoka Meditech Corp.	22-3, Hongo 2-chome, Bunkyo-ku, Tokyo, 113-0033, Japan	Manufacture and sale of medical hypodermic needles
GI Medical Co., Ltd.	6, Asahigaoka 2-chome, Hakusan, Ishikawa Prefecture, 924-0004, Japan	Mail-order sale and wholesale of dental and medical supplies

## Energy Business

\*Plus six regional energy business companies (Hokkaido)

Air Water Hello Support Inc.	3-5, Minami 19 Jonishi 6-chome, Chuo-ku, Sapporo, Hokkaido, 064-0919, Japan	Various services and maintenance for energy retail industry
Air Water Techno Supply Inc.	3-2, Omagarikogyodanchi 7-chome, Kitahiroshima, Hokkaido, 061-1274, Japan	Filling, delivery and safety services for industrial gas and medical gas, and LP gas

## Agriculture and Food Products Business

Air Water Farm Agricultural Production Corporation	2, Kita-Sanjo-Nishi 1-chome, Chuo-ku, Sapporo, Hokkaido, 060-0003, Japan	Production and sale of fruit and vegetables
Saveur SS Inc.	3-17, Kikusui 5 Jo 2-chome, Shiroyishi-ku, Sapporo, Hokkaido, 003-0805, Japan	Manufacture and sale of processed meat products (ham and delicatessen), ingredient-type frozen foods, cooking sauces and sweets
Tomiiichi Co., Ltd.	13-5, Nagayama Kita 1 Jo 10-chome, Asahikawa, Hokkaido, 079-8451, Japan	Wholesale and processing of fruit and vegetables for processing, and sale of frozen foods, etc.
Nichinoki Seiko Co., Ltd.	13, Konan 1-chome, Ashoro, Ashoro-gun, Hokkaido, 089-3727, Japan	Manufacture and sale of agricultural machinery
Hayasiya Co., Ltd.	160-69, Satsunaimizuhomachi, Makubetsu, Nakagawa-gun, Hokkaido, 089-0554, Japan	Sale of frozen vegetables
Air Water Tokachi Foods Co., Ltd.	194-5, Sarabetsumura, Aza, Kasai-gun, Hokkaido, 089-1542, Japan	Manufacture and sale of frozen foods and canned and retort pouch food products
Gold-Pak Co., Ltd.	8-9, Sakuragaokacho, Shibuya, Tokyo, 150-0031, Japan	Manufacture and sale of fruit and vegetable juices, soft drinks, and other beverages
KYUSUYUA Co., Ltd.	24-1 Koshino, Hachioji, Tokyo, 192-0361, Japan	Operation of fruit and vegetable retailing stores in department stores, station buildings and shopping centers, and operation of supermarkets
Sagami Ham Co., Ltd.	1158-1, Kawamukocho, Tsuzuki-ku, Yokohama, Kanagawa Prefecture, 224-0044, Japan	Sale of processed meat products and meat and prepared dishes
Daisen Ham Co., Ltd.	3018, Yomicho, Yonago, Tottori Prefecture, 683-0851, Japan	Manufacture and sale of ham, bacon, sausage and other processed foods
Plecia Co., Ltd.	3-8, Shinyokohama, Kohoku-ku, Yokohama, Kanagawa Prefecture, 222-0033, Japan	Manufacture and sale of Japanese confectionary and Western confectionary
AW Water, Inc.	3500-1, Omachi, Omachi, Nagano Prefecture, 398-0002, Japan	Manufacture and sale of drinking water, etc.

## Logistics Business

Air Water Logistics Co., Ltd.	1-6, Tsukisumi Higashi 2 Jo 16-chome, Toyohira-ku, Sapporo, Hokkaido, 062-0052, Japan	High pressure gas logistics, general cargo logistics, food logistics, medical and environment logistics, and distribution and processing services
Hokkaido Shatai Co., Ltd.	7-3 Omagarikogyodanchi 2-chome, Kitahiroshima, Hokkaido, 061-1274, Japan	Design and production, sale and repair of various types of truck, and vehide inspection and maintenances for various types of vehicle
Air Water Food Logistics Co., Ltd.	9-8, Ogimachi 5-chome, Miyagino-ku, Sendai, Miyagi Prefecture, 983-0034, Japan	Food low-temperature logistics, warehouse storage and warehouse operations under contract
East Japan Air Water Logistics Co., Ltd.	1020, Kawamukocho, Tsuzuki-ku, Yokohama, Kanagawa Prefecture, 224-0044, Japan	High pressure gas logistics, general cargo logistics, food logistics, medical and environmental logistics, and distribution and processing services
West Japan Air Water Logistics Co., Ltd.	13-22, Nishinakajima 4-chome, Yodogawa-ku, Osaka, Osaka, 532-0011, Japan	High pressure gas logistics, general cargo logistics, food logistics, medical and environmental logistics, and distribution and processing services

## Other Businesses

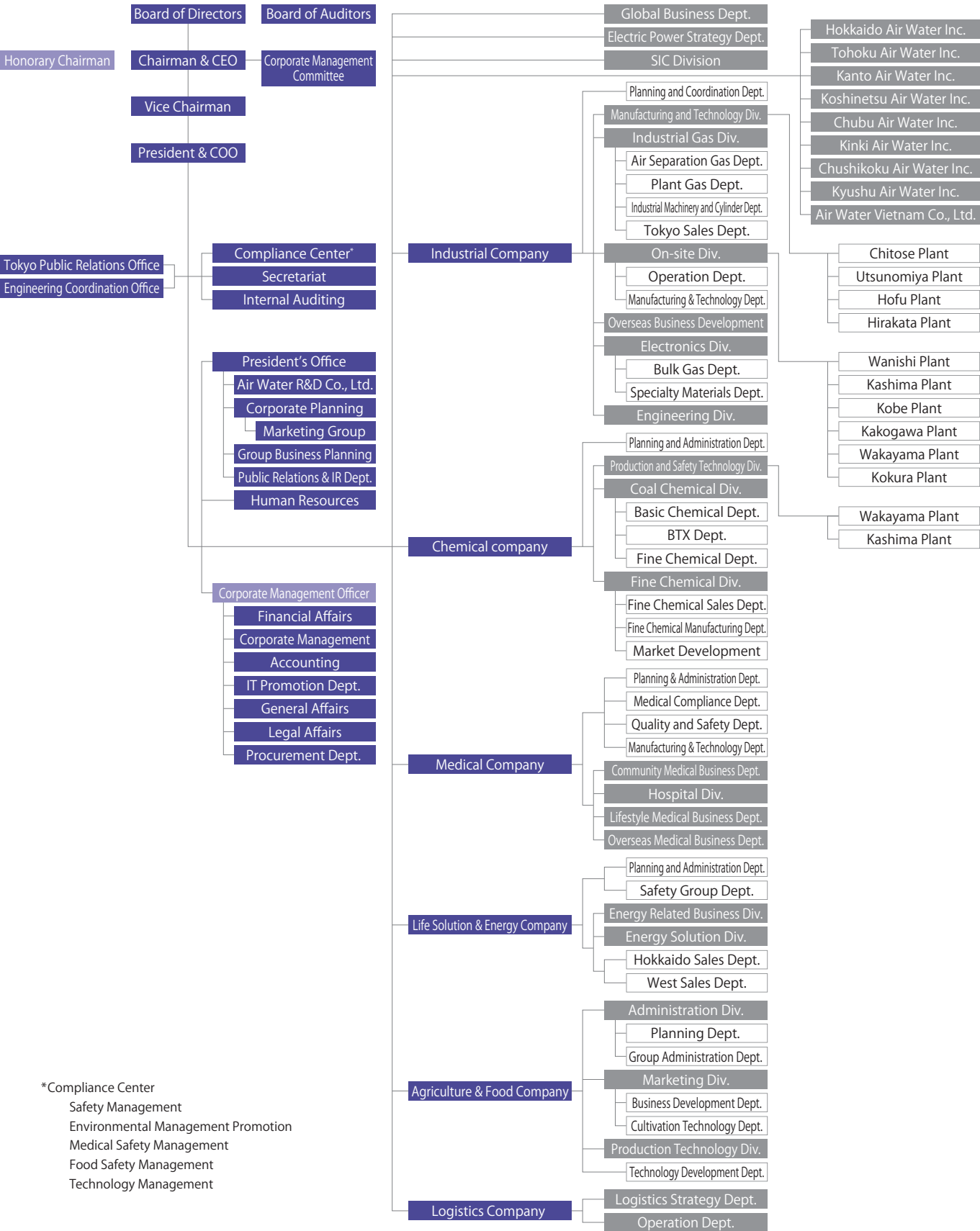
Hokkaido Air Water Engineering, Inc.	2-16, Kitaokadama 3 Jo 3-chome, Higashi-ku, Sapporo, Hokkaido, 007-0883, Japan	Installation, inspection and maintenance of generating units, storage tanks and pipes for various types of gas
Summit Onahama S Power Corporation	2-4, Nagisa, Onahama, Iwaki, Fukushima Prefecture, 971-8101, Japan	Manufacture and sale of electric power and steam
Celco Inc.	1416-4, Kume, Oaza, Tokorozawa, Saitama Prefecture, 359-1131, Japan	Sale of electronic equipment and components, and development and proposal of circuit units
Air Water Sol Inc.	47-1, Kanda Higashimatsushitacho, Chiyoda-ku, Tokyo, 101-0042, Japan	OEM supply of aerosol products, and manufacture and sales of own brand products
Nihonkaisui Co., Ltd.	2-5, Kanda Surugadai 4-chome, Chiyoda-ku, Tokyo, 101-0062, Japan	Manufacture and sale of salt and byproducts, environmental business and electric power business
Japan Salt Corporation	1-1, Kyobashi 1-chome, Chuo-ku, Tokyo, 104-0031, Japan	Purchase and sale of salt and chemicals
K&O Energy Group Inc.	661, Mobara, Chiba Prefecture, 297-0026, Japan	Business management of subsidiaries which are engaged in the gas business, iodine business, etc.
Daiho Sangyo Inc.	6-7, Shibakoen 1-chome, Minato-ku, Tokyo, 105-0011, Japan	Trade and procurement business
Panasonic Eco Solutions AWE Co., Ltd.	10-27, Higashishinagawa 4-chome, Shinagawa, Tokyo 140-0002, Japan	Sale and installation of system baths and construction materials
Aquaintec Corporation	1162-1, Dategata, Kakegawa, Shizuoka Prefecture, 436-0005, Japan	Pipe renewal business, manufacturing of water treatment machinery, and sale of environmental equipment and materials
Air Water ECOROCA Inc.	3440-9 Wakahohoshina, Nagano, Nagano Prefecture, 381-0102, Japan	Manufacture and sale of wood-plastic composite recycled construction materials
Air Water Mach Inc.	4009-1, Azusagawayamato, Matsumoto, Nagano Prefecture, 390-1701, Japan	Manufacture and sales of industrial rubber products and resin products
Air Water Chemistry Inc.	325, Kitajima, Wakayama, Wakayama Prefecture, 640-8403, Japan	Disposal of liquid waste, and oil and gas wastes from plants, and analysis services
Air Water Softech Inc.	12-8, Minami-Semba 2-chome, Chuo-ku, Osaka, Osaka, 542-0081, Japan	Development and sale of computer systems
Air Water Bellpearl Inc.	12-8, Minami-Semba 2-chome, Chuo-ku, Osaka, Osaka, 542-0081, Japan	Manufacture and sale of functional resin Bellpearl, various types of processed goods, and nitrogen gas generating units
Air Water NV Inc.	1-8, Nakahamacho, Amagasaki, Hyogo Prefecture, 660-0091, Japan	Metal surface treatment services using NV nitriding process
Tateho Chemical Industries Co., Ltd.	974, Kato, Aza, Kariya, Aiko, Hyogo Prtefecture, 678-0239, Japan.	Manufacture and sale of magnesium oxide, fused magnesias, magnesium hydroxide, and ceramic products
Air Water Materials Inc.	10-1, Kamigofukumachi, Hakata-ku, Fukuoka, Fukuoka Prefecture, 812-0036, Japan	Sale and export/import of semiconductor manufacturing chemicals, chemical industry chemicals, synthetics resins, and electric and electronic materials

## Overseas

Air Water Mach Rubber Products (Fujian) Co., Ltd.	Honglu Rongqiao Economic and Technological Development Zone, Fuqing City, Fujian Province, China	Manufacture and sale of rubber molded products
Air Water Richap (Jiangsu) Chemical Co., Ltd.	Yingbin Road., Duigougang Chemical Industrial Park, Guannan, Lianyungang, Jiangsu Province, China	Manufacture of electronic materials and pharmaceutical and agrochemical intermediates, etc.
Tateho Chemical Dalian Co., Ltd.	41 NE 2nd St, Jinzhou Qu, Dalian Shi, Liaoning Sheng, China, 116600	Manufacture and sale of electrical grade magnesias
TAYLOR-WHARTON MALAYSIA SDN.BHD.	Lot Nos. PT 5073, 5076 & 5077 Jalan Jangur 28/43 Hicom Industrial Estate 40400 Shah Alam Selangor, Malaysia	Manufacture and sale of low temperature liquid gas storage tanks, small bulk containers, LGC containers, etc.
TATEHO OZARK TECHNICAL CERAMICS, INC.	402 Ware Street, Webb City, Missouri, USA	Manufacture of ceramics



Organization Chart (As of October 1, 2017)



Corporate Profile/Stock Information

Corporate Information (As of March 31, 2017)

Company name	AIR WATER INC.
Head Office	12-8, Minami-Semba 2-chome, Chuo-ku, Osaka, 542-0081, Japan
	Tel (+81) 6-6252-5411 Fax (+81) 6-6252-3965
(Registered Address of Head Office)	2, Kita-Sanjo-Nishi 1-chome, Chuo-ku, Sapporo, 060-0003, Japan
(Tokyo Office)	18-19, Toranomon 3-chome, Minato-ku, Tokyo, 105-0001, Japan
Established	September 24, 1929
Paid-in Capital	¥32,263 million
Number of Employees	12,580 (Consolidated)
URL	http://www.awi.co.jp/english/

Board of Directors (As of June 28, 2017)

Chairman of the Board	Masahiro Toyoda	Chief Executive Officer
Vice Chairman	Yasuo Imai	Assistant Chairman
Vice Chairman	Kikuo Toyoda	Assistant Chairman & President, Medical Company
President & CEO	Kiyoshi Shirai	Chief Operating Officer
Vice President	Yuu Karato	President, Chemical Company
Vice President	Yukio Matsubara	President, Industrial Company
Vice President	Masato Machida	President, Agriculture & Food Company
Senior Managing Director	Hideo Tsutsumi	General Manager, Overseas Business Strategy
Managing Director	Minoru Nagata	Chief Representative for Kanto Operations General Manager, Kanto Branch President, Kanto Air Water Inc.
Managing Director	Yukio Murakami	Chief Representative for Koshinetsu Operations General Manager, Koshinetsu Branch President, Shinano Air Water Inc.
Managing Director	Yasushi Sogabe	Chief Representative for Hokkaido Operations General Manager, Hokkaido Branch President, Hokkaido Air Water Inc.
Managing Director	Hirokazu Kawata	President, Logistics Company
Managing Director	Yoshio Shiomi	Chief Representative for Kinki Operations General Manager, Kinki Branch President, Kinki Air Water Inc.
Managing Director	Katsumi Kajiwara	President, Life Solution & Energy Company
Managing Director	Atsushi Iinaga	Corporate Management Officer
Corporate Director	Kosuke Komura	Human Resources Manager
Corporate Director	Akihiro Toyonaga	General Manager, Accounting
Corporate Director	Kensuke Yamamoto	Assistant to President
Corporate Director	Yukiko Sakamoto	Independent Director
Corporate Director	Yoji Arakawa	Independent Director
Auditor	Hirohisa Hiramatsu	Standing Statutory Auditor
Auditor	Kouichi Nakagawa	Standing Statutory Auditor
Auditor	Hiromi Yanagisawa	Standing Statutory Auditor
Auditor	Akihiko Takashima	Corporate Auditor (part-time)
Auditor	Atsushi Hayashi	Corporate Auditor (part-time)

Principal Shareholders (As of March 31, 2017)

Company	Number of shares held (thousands)	Ratio of shares held (%)
Nippon Steel & Sumitomo Metal Corporation	10,000	5.03
The Master Trust Bank of Japan, Ltd. (trust account)	9,407	4.73
Sumitomo Mitsui Trust Bank, Limited	7,936	3.99
Japan Trustee Services Bank, Ltd. (trust account)	7,800	3.93
Sumitomo Mitsui Banking Corporation	6,196	3.12
Air Water Customers' Stockholding	5,519	2.78
JP MORGAN CHASE BANK 385632	5,274	2.65
The Hokkaido Bank., Ltd.	4,113	2.07
National Mutual Insurance Federation of Agricultural Cooperatives	3,879	1.95
North Pacific Bank, Ltd.	3,874	1.95

Information on Shares

Fiscal Year	From April 1 to March 31
Annual General Meeting of Shareholders	June
Record Dates	Annual meeting: March 31 Year-end dividends: March 31 Interim dividend: September 30
Total Number of Issued Shares	198,705,057 shares
Number of Shares per Unit	100 shares
Manager of the Register of Shareholders	4-1, Marunouchi 1-chome, Chiyoda-ku, Tokyo, Japan Sumitomo Mitsui Trust Bank, Limited.
Telephone Number for Inquiries	TEL 0120-782-031 (toll-free in Japan)
URL	http://www.smtb.jp/personal/agency/index.html
Method of Public Notice	Electronic public notice *URL depicting public notice http://www.awi.co.jp/ir/koukoku.html
Listed Financial Instruments Exchange	Tokyo, Sapporo
Securities Code	4088