

# Fostering Dynamic







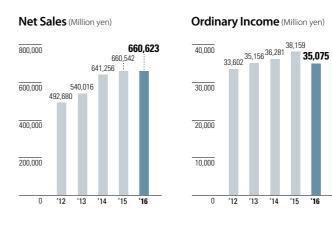
**Consolidated Financial Highlights** 

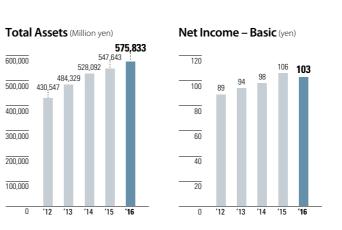
(Comparison of the past 5 fiscal years)

					Million of yen	Thousand of U.S. dollars*	Increase (Decrease)
	2016	2015	2014	2013	2012	2016	2016/2015
Net sales	¥ 660,623	¥ 660,542	¥ 641,256	¥ 540,016	¥ 492,680	\$ 5,862,824	0.0%
Operating income	39,524	36,127	35,078	27,897	31,672	350,763	9.4
Ordinary income	35,075	38,159	36,281	35,156	33,602	311,280	(8.1)
Profit attributable to owners of parent	20,139	20,703	19,225	18,366	17,167	178,727	(2.7)
Total assets	575,833	547,643	528,092	484,329	430,547	5,110,339	5.1
Interest-bearing debt	157,794	154,863	155,480	141,295	119,386	1,400,372	1.9
Shareholders' equity	234,725	226,374	203,500	185,599	170,448	2,083,111	3.7
Free cash flow	43,512	51,072	48,249	30,057	39,662	386,155	(14.8)
Cash flows from financing activities	(8,115)	(7,941)	4,620	10,254	(7,612)	(72,018)	2.2
Capital investment	42,236	35,959	32,348	34,110	22,843		
Allowances for depreciation	26,621	27,335	24,337	22,058	20,373		
PER SHARE OF COMMON STOCK					Yen	U.S. dollars*	
Net income - basic	¥ 102.73	¥ 105.75	¥ 98.29	¥ 94.04	¥ 89.35	\$ 0.91	(2.9)
Net assets	1,196.92	1,155.80	1,040.22	949.63	873.78	10.62	3.6
Cash dividends applicable to the year	28.00	28.00	26.00	24.00	22.00	0.25	0.0

\*Notes: The translation of Japanese yen into U.S. dollars has been made solely for the reader's convenience at the rate of ¥112.68= U.S.\$1.00, the rate prevailing on the Tokyo Foreign Exchange Market on March 31, 2016.

NON-FINANCIAL INFORMATION					Persons	
Number of employees	11,334	10,147	9,557	8,937	8,062	11.7





#### 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.

## Management Philosophy



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

The Air Water Group delivers air and water-the source of all life on Earth-and this makes us a worker of the planet. Air and water are limited resources, but work related to the Earth presents limitless possibilities. Our goal at Air Water is draw on our entrepreneurial spirit and pride to take on challenges in business fields related to the Earth with its limitless possibilities, and in business fields related to people's daily lives, and to use our wisdom to create new businesses and contribute to society.

#### C O N T E N T S

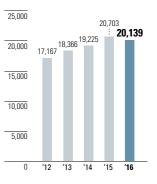
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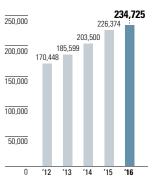


#### AIR WATER INC. and Consolidated Subsidiaries, Years ended March 31

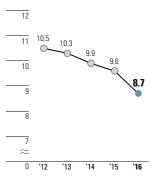
#### Net Income (Million yen)



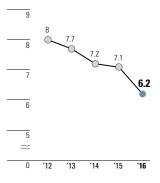
#### Total Net Assets (Million yen)



Return on Equity (%)



#### Return on Assets (%)



# The Air Water Group is steadily promoting our growth strategies in each business area and will without fail become a one-trillion yen company by FY2020.

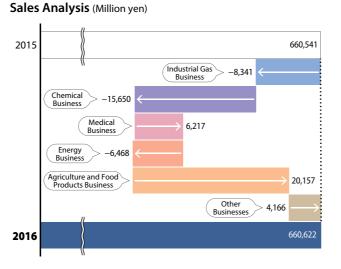


#### Please tell us about the Air Water Group's performance in FY2015.

We minimized the negative effects of the Chemical Business, and each of our business segments reported optimism about the future.

FY2015 presented a harsh business environment due to an intensifying sense of stagnation in the Japanese economy, led by the drop in crude oil prices and deceleration of growth in the Chinese economy. Amidst this climate, despite a severer than expected decline in gas supply for blast furnaces, the Industrial Gas Business saw improved performance as a result of notable progress in acquiring new customers and the subsiding effects of electricity price hikes. The Medical Business also produced better results than the previous year in all areas thanks to the launch of a new home care product, a strengthening of initiatives targeting major hospitals and other activities. The Energy Business overcame the tough business environment of low crude oil prices by implementing thorough measures to expand volume. In the Agriculture and Food Products Business, we welcomed a national fruit and vegetable retail chain and wholesaler into the Group in aggressive M&A activity aimed at strengthening and expanding the business and laying a foundation for creating synergies. The Seawater, Logistics and other businesses supporting our Order Rodentia Style of Business also steadily executed their respective growth strategies and contributed to our overall performance.

Meanwhile, the Chemical Business experienced difficulty, particularly in the tar distillation business, due to deteriorating market conditions stemming from a drop in crude oil prices and the slowing Chinese economy. This, plus the stock losses of our Chinese subsidiary, which was accounted for by the equity



method, had a significant impact on Air Water's overall profits. As a result, consolidated sales for the current term were 660,623 million yen (100.0% compared to the previous term), operating income was 39,524 million yen (109.4%), ordinary income was 35,075 million yen (91.9%), and profit attributable to owners of parent was 20,139 million yen (97.3%).



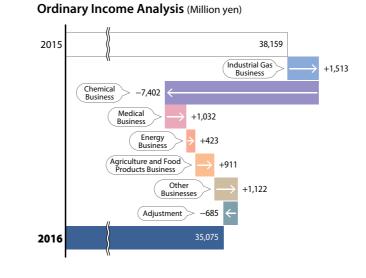
Please tell us about the progress and accomplishments of the mid-term business plan NEXT-2020 Ver. 2.

We were successful in both strengthening the foundations of our industrial-based businesses, and growing and expanding our businesses involving people.

The Air Water Group has promoted the three-year mid-term business plan NEXT-2020 Ver. 2 since FY2013. FY2015 was the last year of this plan, which we position as the second step of our long-term growth vision of becoming a one-trillion yen company in FY2020.

Over the past three years, in industrial-based businesses starting with the Industrial Gas Business, we accelerated structural reforms and rebuilt fundamental businesses in efforts to address the management challenge of rebuilding earning power. And in businesses involving people, as represented by the Medical Business, we pursued synergies to maximize Air Water's overall strength and took on challenges in growth areas under the management target of aiming for high business growth through M&A.

Regarding structural reforms in the Industrial Gas Business, we minimized the impact of the extremely harsh business environment caused by the hike in electricity prices, which account for around 60% of manufacturing costs), by promoting the VSU strategy, streamlining plant replacement, and optimizing gas prices. These initiatives consequently strengthened the foundation of the Industrial Gas Business, making it less vulnerable to changes in the business environment. As for M&A activity in businesses involving people, throughout the past three years we finalized the acquisition of a total of 14 companies, predominantly in growth areas. Not only did this generate approximately 70 billion yen in new consolidated sales, it also helped to steadily build a foundation for creating synergies in each field in the future. The Company is also making steady progress in overseas



business expansion and the power generation business, which it identifies as future growth areas.

In terms of numerical targets, while we fell short of plans in sales and ordinary income, we achieved a significant rise in operating income over the last fiscal year. By segment, the Industrial Gas and Medical businesses surpassed their respective profit targets, and despite the decline in earnings in the Chemical Business due to investment losses under the equity method, all other segments succeeded in securing 8% growth in ordinary income. I am confident to say we are firmly on track to achieve our goal of becoming a one-trillion yen company by FY 2020.



#### What are the key points of NEXT-2020 Ver. 3, the mid-term management plan that starts in 2016?

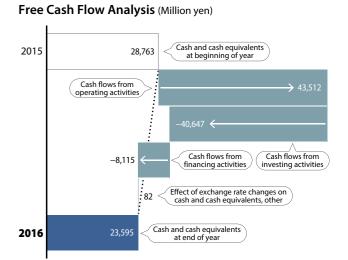
NEXT-2020 Ver. 3 aims to realize our one-trillion yen company vision and build a foundation for post 2020.

The new mid-term management plan, NEXT-2020 Ver. 3, launched as we began FY2016. In this plan, we set forth two management challenges: establishing a structure for achieving the vision of being a one-trillion yen company, and building a foundation for post 2020. We will once again reflect on our founding spirit, assess the trends that relate to our businesses, consider how Air Water can contribute to society and take on challenges to resolve a variety of social issues.

The basic concept of Ver. 3 is challenges for structural reform and sustainable growth. To build a business foundation capable of generating higher earnings and become a corporate group capable of sustainable growth and development in the future, we have set the following three main implementation measures.

The first is pursuing ultimate solutions services and providing innovation. We will commit ourselves to thoroughly pursuing optimal products and services that satisfy customers' needs and leveraging the Group's overall strengths to provide innovation. Furthermore, we are carrying out initiatives that will strengthen business deeply rooted in local communities, doing so mainly through our nine regional companies located across Japan.

The second implementation measure is strengthening our corporate structure by implementing business structural reform.



In addition to expanding strategic investment aimed at strengthening our business foundation, we will aim for thorough streamlining and rationalizing in all divisions. We will also practice management that places importance on compliance.

The third and final implementation measure is challenges towards issues for post 2020. This involves conducting M&A activity taking into account our situation after achieving the goal of becoming a one-trillion yen company in FY2020, accelerating overseas business expansion and strategic technical development.

Through the above initiatives, our aim in FY2018, the final year of Ver. 3, is to realize the numerical targets of 850 billion yen in sales, 51 billion yen in operating income, 51 billion yen in ordinary income and 29 billion yen in net income. In FY2016, the first year of the plan, our outlook is 700 billion yen in sales (106.0% compared to the previous fiscal year), 42.5 billion yen in operating income (107.5%), 42 billion yen in ordinary income (119.7%), and 23 billion yen in profit attributable to owners of parent (114.2%).



Please tell us about the Air Water Group's future management policies and goals.

Our goal is to achieve continuous sustainable growth utilizing our All-Weather Management System and Order Rodentia Style of Business to meet your expectations.

The Air Water Group considers the distribution of profits to shareholders a top-priority management priority, and our basic policy is to provide stable dividends targeting a payout ratio of 30%. In the current term, the total of year-end dividends and interim dividends was 28 yen.

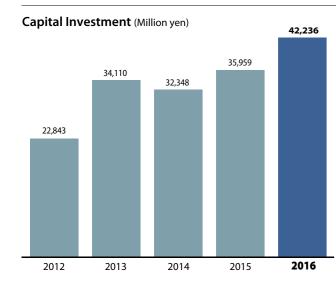
The Air Water Group will further promote two key policies: the All-Weather Management System to withstand changes in the environment by suitably balancing industrial and human-related businesses, and the Order Rodentia Style of Business, which creates diverse synergies through collaboration between highly adaptable and vigorous medium-sized enterprises. These policies are the focus of our efforts to achieve sustainable growth by corporate structure resilient to changes in the business environment. In each segment, in addition to building a robust earnings base through

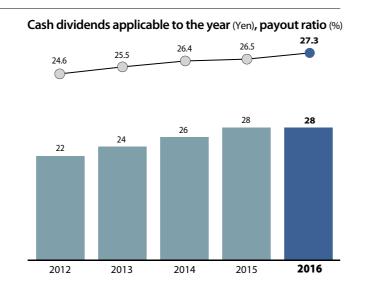


the promotion of thorough regional strategies led by regional companies, we will create unique businesses in each region and generate business-to-business synergies. Moreover, to strengthen existing businesses and at the same time create new businesses, we will continue to accelerate Air Water-style M&A activity. Our investment plan allocates 60 billion yen to M&A, 140 billion yen to new equipment installations, upgrades and other forms of capital investment, and 40 billion yen to strategic investment toward expanding the Power Generation Business. At a total of 240 billion yen, this is the largest value to date and a bold investment plan to realize our goal of creating sustainable corporate value. In overseas expansion, leveraging our acquisition of Taylor-Wharton Malaysia in February, we will fuse the gas-related technologies Air Water forged in Japan with Taylor-Wharton's engineering technologies to create overseas businesses with high cost competitiveness. Although we experienced an unexpected standstill in the final year of Ver. 2, we are confident that a foundation has been laid to achieve our vision of becoming a one-trillion yen company, and the Air Water Group will continue to take on bold, dynamic challenges. I wish to express my gratitude for your ongoing understanding and ask for your continued support as we proceed with our journey into the future.

Chairman and CEO AIR WATER INC.

Mr. Togola





#### Results and Accomplishments of Mid-term Management Plan NEXT-2020 Ver. 2

The mid-term management plan NEXT-2020 Ver. 2, launched in FY2013, set forth the major management challenges of rebuilding earning power in industrial-based businesses and aiming for business growth through M&A in businesses involving people. Over the course of the three-year plan, each business division

#### Main Accomplishments Based on Three Basic Policies

Promoting M&A to Propel **Business Growth** 

#### Strengthening Corporate Foundation through Structural Reforms

cost improvements

Chemical Business

to China

oil prices

#### Medical Business

✓ Leveraged M&A to strengthen home care and medical care services, and reinforce the foundation of the overall medical business aimed at hospital care

#### Agriculture and Food Products usiness

✓ Accelerated M&A both upstream and downstream toward building an independent value chain

#### Energy Business

✓ Compensated for market influence through thorough commercial rights acquisition and sales expansion measures

#### Chemical Business

 Acquired Kawasaki Kasei Chemicals and strengthened overall business

#### M&A Results

✓No. of companies: 14 New consolidated sales total: 68.9 billion yen

#### FY2012 Performance (final year of NEXT-2020 Ver. 1) Net sales : 540.0 billion yen

Operating income : 27.9 billion yen Ordinary income : 35.2 billion yen Net income : 18.4 billion yen



## Establishment of Mid-term Management Plan NEXT-2020 Ver. 3 to Realize Vision of Becoming a One-trillion Yen Company

Although unable to achieve some finer targets of the mid-term management plan NEXT-2020 Ver.2, Air Water Inc. secured 8% annual growth in ordinary income for all segments apart from the Chemical Business, and overall embarked on a path of growth toward becoming a one-trillion yen company by FY 2020. In light of this result. Air Water established the mid-term management plan NEXT-2020 Ver. 3 as the third step of the long-term vision for one-trillion ven company by FY 2020, and initiatives in line with this plan are already being implemented.

The next three years present risk factors for the Japanese economy, such as unstable exchange rates, the effects of the consumption tax increase, and the shrinking population; however, demand generated by the 2020 Tokyo Olympics is predicted to bring about overall stability. On the other hand, there is a heightened sense of uncertainty in overseas economies due to factors such as the decelerating Chinese economy, the stagnant crude oil market, and increased geo-political risks. Amidst this business environment, the Air Water Group will

steadily implemented various initiatives to achieve their respective goals. Persistent effort led to an improved foundation for the Industrial Gas Business, high growth in new fields and the numerous other achievements listed below

#### Industrial Gas Business

- ✓ Promoted optimization gas prices in line with electricity price hikes
- ✓ Built new VSU and filling station, aggressively promoted plant replacement and prepared a regional supply system
- ✓ Fine Chemical promoted shift in production
- ✓ Despite structural reforms, performance of subsidiary accounted for by the equity method declined due to the drop in crude

#### Development of Growth Drivers

#### Overseas Expansion

- ✓ Started operations at Vietnam plant using VSU technology
- Acquired Ellenbarrie and expanded into India
- ✓ Metal Surface Treatment Business overseas became profitable; R&D accomplishments

#### Power Generation Business

- ✓ Nihonkaisui Co., Ltd. began wood biomass-based power generation
- ✓ Started construction of energy center that utilizes wood biomass from Azumino
- Carried out an environmental assessment for the plan to build a biomass and coal mixed combustion power generation plant in Yamaguchi

#### FY2015 Performance

Net sales : 660.6 billion ven Operating income : 39.5 billion yen Ordinary income : 35.1 billion yen Net income : 20.1 billion yen

clearly define the trends influencing its businesses and proactively take on challenges to resolve social issues in many fields affecting people's lives, from manufacturing to medical and food.

The next mid-term management plan, NEXT-2020 Ver. 3, introduces the management challenges of establishing a structure for achieving the vision of being a one-trillion ven company and building a foundation for post 2020. In addition to creating suitable systems and further refining the Company's business foundation to withstand changes in the business environment, the aim is to continue growing beyond 2020. To this end, the Air Water Group recognizes that it must immediately begin implementing the policies that will form the basis of its goals. The wisdom of the entire Group will be mustered to give shape to the Air Water value of creating and developing businesses involving air, water, the planet Earth and its people, reflecting the Air Water founding spirit and pride. Over the next three years, Air Water will steadily advance toward its vision of becoming a one-trillion yen company.

#### Outline of Mid-term Management Plan NEXT-2020 Ver. 3

NEXT-2020 Ver. 3 further enforces the underlying principles of Air Water-style management: the All-Weather Management System and the Order Rodentia Style of Business. The basic concept of the new mid-term management plan is "Further challenges for structural reform and sustainable growth." By steadily promoting the three

main implementation measures given below, the Air Water Group will further enhance its earning power and create a business foundation with higher earning capabilities toward becoming a business group that achieves growth and development into the future.

Basic Concept of Mid-term Management Plan NEXT-2020 Ver. 3

#### "Challenges for structural reform and sustainable growth"

Foster earning power, create a business foundation with higher earning capabilities, and enjoy continuous growth and development

#### **Three Implementation Measures**

#### Pursuing ultimate solutions services and providing innovation

Pursue optimal products and services to satisfy customers' needs

• Achieve business innovation through crystallization of the Air Water Group's overall strengths

Strengthen business structures with a focus on regional business

#### Strengthening corporate structure by implementing structural reforms

 Invest strategically to strengthen business foundation · Establish a support system for each business division Thoroughly streamline and rationalize all divisions Enforce compliance

#### Challenges towards issues for post 2020

• M&A

Overseas

#### **Performance Targets**

(Unit: nunarea million ye						(onit: nundred million yen)	
	Ver. 2 Final year	New mid-term management plan NEXT-2020 Ver. 3			Growth in 3 years (compared to FY2015)		
	FY2015	FY2016	FY2017	FY2018	Increase/decrease	Percentage	
Net sales	6,606	7,000	7,700	8,500	1,894	128.7%	
Operating income	395	425	460	510	115	129.0%	
Ordinary income	351	420	460	510	159	145.4%	
Net income	201	230	260	290	89	144.0%	

Strategic technologies

	Management indicators		
Ordinary Income Ratio	More than 6%		
ROE	More than 10%		
Equity Ratio	40%		
Net D/E Ratio	0.75 or less		

Numerical targets for the final year of NEXT-2020 Ver. 3, FY2018, are set at 850 billion yen in sales, 51 billion yen in operating income, 51 billion yen in ordinary income and 29 billion yen in net income.

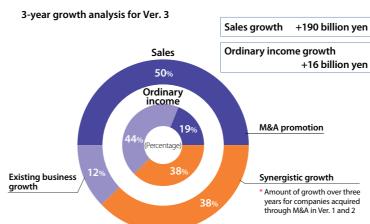
In regard to maintaining and enhancing asset efficiency and capital efficiency, the target is set at return on earnings (ROE) of 10% or higher while continuing to secure a stable financial status with an equity ratio of 40% and net D/E ratio of 0.75 or less.

#### **Portfolio Objective**

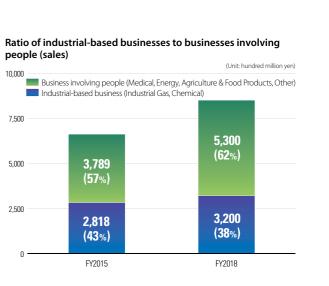
#### Portfolio that achieves growth (sales) 10,000 Businesses needed to achieve 9.000 next-generation growth Overseas, Electric Power, R&D 8.000 7,500 7,000 6.000 ses with high growth pot Medical, Agriculture & Food Product 5,000 5,000 4,000 3,000 esses supporting profit foundation through steady growth 2.000 1,000 Industrial Gas, Energy, Chemical 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

Throughout the three years of NEXT-2020 Ver. 3, the plan is to propel the entire Air Water Group forward by achieving high growth in the Medical and Agriculture & Food Product businesses, as well as other independent businesses. The Air Water Group will also endeavor to secure profits through steady growth in the Industrial Gas, Energy and Chemical businesses. In the final year of the plan, the goal is to have businesses involving people make up more than 60% of the portfolio. However, steady growth in industrial-based businesses will

#### Growth Strategies and Investment Plans Leveraging M&A



The Company predicts growth as the result of new M&A to be around 50% in sales and 19% in ordinary income. The distinguishing characteristic of M&A conducted by the Air Water Group is that the focus is not merely on numbers. Each new company acquired triggers structural reform to strengthen the business, creates new synergies with the diverse existing Group companies to make up an original business, and promotes further growth. The key to future M&A lies in the extent of the synergies that can be created, both between new businesses and between new and existing businesses. Next-2020 Ver.3 introduces the Group's largest ever investment



also be promoted moving forward.

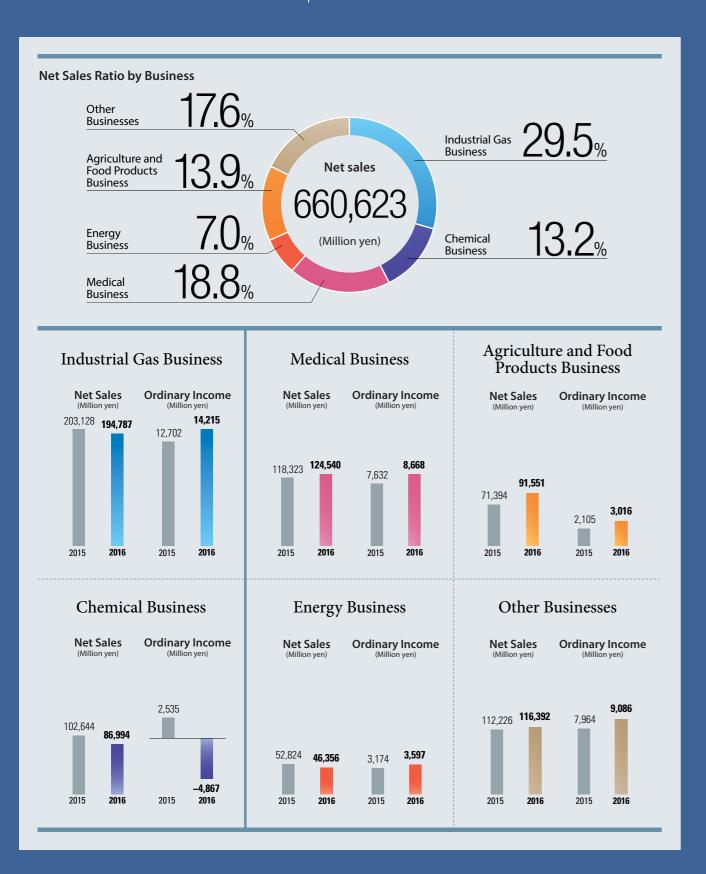
Through the execution of NEXT-2020 Ver. 3, Air Water Inc. will become a company with high earning capabilities and further resilience to changes in the business environments in order to realize its vision of becoming a one-trillion yen company by FY 2020. At the same time, it will further increase the overall strength of the Air Water Group utilizing its diversity of businesses required for future growth to ensure sustainable growth beyond 2020.

	(Unit: hundred million yen
	Ver. 3 Plan
Capital investment	1,400
(amortization)	(905)
M&A investment	600
Strategic investment (power generation)	400
Total	2,400

plan of 240 billion yen over three years, including 60 billion yen in M&A investment essential to the Air Water growth strategy. Investment for industrial-based businesses comprises modernization and proactive enhancement of gas plant facilities. For businesses involving people, the plan is to conduct well-balanced investment in growth areas. In addition, strategic investments will be made in the Power Generation Business and other areas toward future business development, for bold implementation of solid measures that will increase the Air Water corporate value into the future.

# Business

Generating Synergies in a Portfolio of Six Businesses to Achieve Stable Growth





#### **Industrial Gas** Business

- Tank Trucks and Cylinders Supply High-efficiency Compact Liquid Nitrogen/Oxygen Co-production Plant (VSU)
- Large-scale On-site Supply
- Small- to Medium-scale On-site Supply Industrial Equipment
- Engineering
- Electronics and Information Electronics Materials
- BELLPEARL<sup>®</sup>

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

## As the top seller of medical gas, Air Water offers comprehensive medical solutions from advanced medical care to everyday, general medical care. The Group proactively engages

Hospital Facilities

Medical Services

Medical Equipment

Medical Gas

Home Care



#### **Chemical Business**

- Gas Purification and Basic Chemicals
- Carbon Materials
- Tar Distillation • Agricultural Chemicals Intermediates
- Pharmaceutical
- Intermediates Electronics Materials
- Kawasaki Kasei Chemicals Ltd.

The Coal Chemicals business refines coke oven gas supplied by steel works and manufactures chemical products, while the Fine Chemicals business creates high-quality products from organic compounds utilizing synthesis technologies. Kawasaki Kasei Chemicals Ltd. contributes to the creation of synergies between these two areas so that Air Water can meet the diverse needs of its customers with abundant knowledge and expertise.

### **Energy Business**

- LP Gas and Kerosene
- Natural Gas Pipeline Distribution
- Energy Equipment Fuel Conversion
- LP Gas-type Mobile Power Source Cars
- LNG Transport and Storage Tanks

With the goal of enriching people's lives, Air Water began its LP Gas business in Hokkaido in 1955, and created an energy source revolution in general households. Currently, the LP Gas and Kerosene businesses operate under the Hello Gas brand. The Energy Business is also evolving its business as a comprehensive energy company through a range of businesses that include supplying natural gas, and manufacturing and selling LNG containers for which demand is predicted to grow.



#### Medical Business

in the construction of hospital facilities such as operating rooms, medical equipment, hospital support services such as SPD and contract sterilization, and home care and nursing care.





#### Agriculture and Food **Products Business**

#### Agriculture

- Agricultural Machines and Tools
- Fruit / Vegetable Distribution and Processing
- Sales of Fruit & Vegetables
- Ham, Delicatessen and Frozen Foods
- Fruit and Vegetable Juices
- AW-Water (home delivered drinking water)

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 it has expanded to cover everything from the production of vegetables, processed foods and cold beverages to distribution and sales in the Japanese market, entirely within the Air Water Group. By pursuing synergies between individual group companies, the Group delivers safe and secure food to consumers.



#### **Other Businesses**

- Salt
- Magnesia
- Logistics Aerosol
- NV (metal surface treatment) O-rings
- ECOROCA® (artificial recycled wood)
- SiC

With their unique, distinct products, these businesses are responsible for the Order Rodentia Style of Business that supports the growth of the entire Group. The Other Businesses segment incorporates a myriad of fields, including salt and magnesium made from seawater elements, logistics that leverage low-temperature transportation technology accumulated in the high-pressure gas business, aerosols, O-rings and NV (metal surface treatment).

# Industrial Gas Business

#### **Review of FY2015**

Stark contrast was observed in the Industrial Gas Business in FY2015, between ongoing robust production for chemicals, ship-building, electronic components and so forth, and lower production in the automotive industry, which had a large ripple effect on the steel and manufacturing industries overall. Despite a fall in on-site gas supply for steel, gas demand overall remained robust, particularly in regard to cylinder and tank truck supply. Amidst these circumstances, the Industrial Gas Business accurately distinguished the timing of capital investment by users and acquired new gas demand from small- to medium-sized on-site plants. While the cost of electricity, which accounts for around 60% of manufacturing costs, continued to rise since the 2011 earthquake and tsunami disaster, the situation has been ameliorated due to a fall in fuel adjustment costs. However, taking into account issues such as regional differences, Air Water continues to make efforts to ensure appropriate gas prices. In the Information and Electronics Materials Business, performance has been strong, particularly regarding electronics material aimed at the electronics industry. Finally, as part of overseas business development efforts, in February the Air Water Group acquired cryogenics manufacturer Taylor-Wharton Malaysia.

#### **Outlook for FY2016**

Through the utilization of the sales networks of regional companies spread across Japan and proactive reinforcement investments in industrial gas plant equipment, the Industrial Gas Business will aim to establish Air Water as a company with a strong regional presence. While an optimistic outlook on future gas demand is not possible due to the potentially uncertain business environment for Japan's manufacturing industry stemming from the deceleration of the Chinese economy, a strong yen and other factors, the Industrial Gas Business will further strengthen its regional based, characteristic businesses within Japan. Regarding location of VSU sites representing Air Water's major bases, Nagasaki Ekisan Co., Ltd., the 13th VSU, went online in July, and the Group will continue to make maximum efforts to develop this field. With operations commencing at the Air Water Carbonic Inc. Kawasaki plant, the Group is expanding its supply capacity in the Kanto region, the largest market for carbon dioxide for which supply and demand has been tight. Through these endeavors, Air Water will continue promoting aggressive capital investment.

#### Tank Trucks and Cylinders

Air Water has built a solid local production for local consumption network that ties its industrial gas plants and filling stations to its regional business companies and this supplies various types of gases to every industry in the region. From the meticulous supply of single gas cylinder for small-scale

The VSU high-efficiency, compact liquefied oxygen/nitrogen production

"production in appropriate quantities near where there is local demand,

and delivery by short-distance transportation," enabling local supply for

plant is a unique Air Water business model based on the concept of

demand to the supply of gas cylinder bundles, PLC (ultralowtemperature liquefied gas containers), and liquefied gas tank trucks appropriate to usage and purpose, Air Water delivers gas in a manner that is optimally suited to quantity and usage needs.

local demand working with local

partner companies. The VSU plants in

13 locations throughout Japan form an

industrial gas supply network that is

highly resistant to disasters, create a

safe and stable supply system, and

help cut CO<sub>2</sub> emissions in gas transport

VSUs



The 13th VSU, Nagasaki Ekisar

#### Large-scale On-site

In industrial fields such as steel, which constantly require a large volume of industrial gas, Air Water installs large-scale gas manufacturing systems on-site at users' plants, and provides an efficient and stable supply through piping. The plants where such systems are located can leverage

the merits of scale as manufacturing bases for nitrogen gas for external sale. Air Water endeavors to reduce electric power costs and conserve energy through the introduction of cutting-edge technologies that achieve highly efficient gas production.



#### Small- to Medium-scale On-site

Beginning with the V1 high-purity nitrogen generator developed using proprietary technology in 1984, Air Water has developed a wide variety of generators, such as the cryogenic air separation system, cold energy and PSA models that do not require a catalyst. Through on-site installation, Air Water provides a

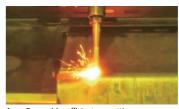
stable supply to users with smallto medium-scale demand predominantly in the electronics, glass and paper pulp industries.



#### Industrial Equipment

Air Water offers all types of industrial equipment, including those requiring shielding gas for welding. The ELNACKS®, a gas for welding steel shields that enables high-quality welding and, in the gas-cutting field, the V Agua Gas, which generates Agua Gas, a fuel gas featuring

high-speed cutting and lower energy consumption, are flagship technologies of the Group's developing welding solution services.



Aqua Gas enables efficient gas cutting

#### 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 development, design, fabrication, installation and maintenance of gas equipment and devices. In this way, the Group provides solution services that satisfy users' needs. Moreover, the Company aims to expand its business by taking advantage of the cryogenic technology it has accumulated over many years.



Kawasaki Plant



TOPICS

Air Water Group Water Group

#### **Electronics and Information Electronics Materials**

In addition to the manufacturing, procuring and selling of special gases and high-purity chemicals used in the process of manufacturing semiconductors, LCD panels, solar batteries and so forth, Air Water Materials Inc., a trading company specializing in electrical and electronics

materials, takes full advantage of Air Water's global network to procure raw materials and provide users with various products tailored to their requests.





Hydrogen selenide manufacturing equipment

Imari Logistics Base

#### BELLPEARL

Air Water Bellpearl Inc. manufactures and sells a variety of products including BELLPEARL® functional resin, BELLFINE® electrode material for power storage devices, and ATEC® electrode sheets. It has also developed BELLSWING®, a PSA-type nitrogen gas generator that uses BELLFINE® as its adsorbent.

which it sells to domestic and overseas users



PSA nitrogen gas generator BELLPEARL



## Cryogenic equipment manufacturer Taylor-Wharton Malaysia joins

In February 2016, Taylor-Wharton Malaysia, which manufactures and sells cryogenic equipment, became the latest addition to the Air

Taylor-Wharton Malaysia, which primarily engages in manufacturing and selling of cold evaporators and LGC contain nanufacturing and sening of cold evaporators and sening of cold evaporators and sening of cold evaporators and sent to-listance LNG transport equipment through fusion with Air V ryogenic technologies and serve as a competitive foreign mar





# **Chemical Business**

#### **Review of FY2015**

Due to the slump both in Japan and overseas in the tar distillation business, as carried out by our equity method affiliate, C-Chem Co., Ltd., the Chemical Business faced extremely harsh conditions that resulted in a deficit in FY2015. The main contributing factors to poor performance were the fall in electric furnace steel production due to the overproduction of blast furnace steel in China, the decline of worldwide demand and the slump in the price of needle coke for electrodes due to the substantial drop in crude oil prices. The falling crude oil prices also had an impact on the price of crude benzene, which is a main product of coke oven gas refinement and basic chemicals. Kawasaki Kasei Chemicals, which joined the Air Water Group this fiscal year, leveraged its proprietary technologies in a concentrated effort to expand business areas and technology fields in order to create synergies with Air Water's existing businesses.

#### **Outlook for FY2016**

In view of the crude oil price market conditions and direction of the Chinese economy, the Chemical Business continues to face a harsh business environment; however, it will aim to regain stability and restructure itself into a profitable business.

Positioning gas refinement, basic chemicals, carbon materials and other existing Coal Chemical businesses as a stable base, the Chemical Business will aim for further streamlining of operations. At the same time, it will endeavor to achieve cost rationalization and cultivate new customers in order to thoroughly improve on factors impacting performance. Meanwhile, the Fine Chemical Business, which covers pharmaceutical and agricultural intermediates and electronics materials, will promote reforms in the contract business, while Kawasaki Kasei Chemicals will assume a central role in establishing target areas, building a production system and creating a profitable framework to create synergies with existing businesses at an early stage.

#### Gas Purification and Basic Chemicals

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 directly supply steelworks with the purified gas (fuel gas) essential for blast furnace operation. Furthermore, basic chemicals such as crude

benzene and ammonium sulfate are also produced in the purification process. These products are useful to society as raw materials for a wide variety of industrial products, including resins, solvents, agricultural fertilizers, and synthetic fibers.



e benzene tank

#### **Carbon Materials**

Coal chemical technologies are applied to the development of carbon products with high added value that are then released into the market. Air Water is the only domestic manufacturer of thermally expandable graphite, or TEG, one of its core products. TEG is used in applications such

as seal material for vehicle engines and exhaust gas pumps, and as a flame retardant for building materials. In addition, Air Water's hydrocarbon resin, FR, is highly compatible with rubber and resin, and used as a binding agent for vehicle tire rubber.



Thermally expandable graphite (TEG)

#### **Tar Distillation**

C-Chem Co., Ltd., a joint venture with Nippon Steel & Sumikin Chemical Co., Ltd., is a dedicated tar distillation company with one of the top

production capacities in Japan. The company uses coal tar provided by Air Water 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.



#### Agricultural Chemical Intermediates

As a top global manufacturer of quinolines, indoles, and other heterocyclic compounds, Air Water provides a multitude of compounds to meet the derivative development needs of agrochemical manufacturers around the world—not only in Japan but also in Asia, the Americas and Europe.

These compounds are used as raw materials for the production of many types of agrochemical products such as fruit germicides, plant growth promoting agents and herbicides.



Agricultural Chemical Intermediates

#### Pharmaceutical Intermediates

Air Water makes full use of its multipurpose synthesizing plants (Air Water Kashima Plant, Sun Chemical Co., Ltd.) to produce by commission a diverse array of pharmaceutical derivatives. The plants feature advanced synthesizing technologies and meet GMP standards, and meet the development needs

of highly varied customers including major pharmaceutical manufacturers. The raw pharmaceutical materials and

pharmaceutical intermediates are turned into anticancer drugs, anti-allergenic drugs, nutritional supplements, cough suppressants, eye drops, angiography contrast agents and many other pharmaceutical products that broadly serve the medical care field.



#### Electronics Materials

Liquid air oxidation, nitration, and other advanced polymide synthesizing technologies are utilized to manufacture functional polymer products at Air Water's Kashima Plant and its joint-venture company in China (Air Water-Richap Chemical). These products are used in applications such

as semiconductor sealant and photoresist. SK Resin, a thermosetting phenolic resin, is a core Air Water product that holds a domestic market share of roughly 30% as a semiconductor sealant in the high-end segment. It is available in a broad range of grades.



Semiconductor sealant SK resin



#### Kawasaki Kasei Chemicals Ltd.

With the aim of strengthening the manufacturing, sales and research of the Chemical Business, Air Water welcomed Kawasaki Kasei Chemicals as a consolidated subsidiary in June 2015. Since 1948, it manufactures intermediate materials for building materials, information and electronics materials, food products, and pharmaceutical and agricultural products from petroleum and coal-based raw materials.

The company develops catalysts and processes in-house, and possesses superior technologies and a diversity of functional chemicals. Particularly renowned for being the only company in the world to commercially produce quinone-based products, it is expected to bring about synergies through fusion with existing technologies of the Fine Chemical Business. Kawasaki Kasei Chemicals is also Japan's leading manufacturer of phthalic anhydride, which is used as a raw material for plasticizer and paint, and new business is being developed with Air Water's existing businesses in raw materials and sales channels.



Product sample



#### 14

#### Strengthening a system for increased production through

Acequinocyl is an agricultural chemical that is one of Kawasaki Kasei Chemical's flagship products, and the acaricide that uses this as its main ingredient is extremely efficient. As such, preparations for its registration overseas are underway. In order to respond to the

sudden rise in demand for this acaricide primarily in the North American market, Air Water's Wakayama Plant has taken on a portion of the production process in order to strengthen the system for increased production. This is one example of group synergies, and Air Water will continue to meet the various needs of its customers through mutual exploitation of the two companies' fundamental and production technologies.



akayama Plant

# Medical Business

#### **Review of FY2015**

The environment surrounding the Medical Business is facing a significant turning point with the transition to a super-aged society, which will trigger even greater diversification of medical needs. Amidst this environment, all five business pillars maintained growth: medical gas, namely medical oxygen; construction of hospital facilities such as the design and installation of operating rooms, ICUs, etc.; hospital services such as contract sterilization, SPD and other tasks required in hospitals; medical equipment of which perinatal equipment in particular is Air Water's strength; and home care, which centers on the rental of oxygen concentrators. The Medical Business on the whole made steady progress through an organization specializing in specific areas and regional business development.

In particular, the Konatsu 3SP, a lightweight, compact home oxygen concentrator developed by Air Water's Home Care Business in early 2015, has earned a strong reputation and gained popularity as a rental item. Furthermore, the Air Water Group welcomed Handa Co., Ltd., a medical equipment trading company which focuses primarily on the Hokuriku region, MC Service Co., Ltd., a nationwide medical equipment maintenance company, and Rad Safe Technical Service Co., Ltd., which can attend to radiation protection facilities.

#### **Hospital Facilities**

Amidst forecasts that the need for advanced and acute medical care, which necessitates specialized treatment, will continue to rise, Air Water is involved in the design and installation of operating rooms, intensive care units (ICUs), coronary care units (CCUs), and neonatal intensive care units (NICUs), which are core features of hospitals, and gas supply facilities such as medical gas piping. Air Water Safety Service Inc., Miwa Electric Medical Co., Ltd. and Seiken Medical Co., Ltd. are three manufacturers that are collaborating to create optimal medical environments utilizing extensive experience and cutting-edge technologies.



Advanced medical care operating ro



Vibration test center (Please refer to page 24 for details

#### Medical Gas

As the top supplier of medical gas, Air Water supplies a variety of medical gases, such as medical oxygen that is a core product, nitrous oxide (laughing gas) used as an anesthetic, helium for MR imaging, and sterilization gas used in medical instrument sterilization, to medical institutions across Japan. For medical oxygen, which is required to be in steady supply, Air Water has established an extremely reliable, stable supply system comprising VSUs and other manufacturing and distribution hubs, and a transportation

network that stretches across the entire country. It has also built a remote monitoring system based on in-house development that enables 24-hour-a-day, 365-day-a-year assessment of the state of the medical gas supply and facilities in real time at a monitoring center.



#### Home Care

In 1982, Air Water Inc. became the first company in Japan to import a home oxygen concentrator for medical use, and this move marked the Company's early entry into the home care business. Since then, the Company has developed and manufactured oxygen concentrators, and branched out to also cover ventilators for home use, sleep apnea syndrome treatment chambers and mechanical in-exsufflators. With a paradigm shift in the medical industry from treatment in hospital beds to home care, Air Water offers products and services from the perspective of the patient as represented by its highly acclaimed new product, Konatsu 3SP. The Company will continue to build a business structure capable of providing even more customized support than before.

#### **Outlook for FY2016**

In the Medical Business, Air Water will take advantage of the Group's overall strengths and aim to create and expand business by reinforcing business for hospitals as well as proactively developing measures for the super-aging society.

Operations in the Hospital Facility Business will be further reinforced utilizing Air Water's technological capabilities in the advanced medical-care field and improving the lineup of commercial materials. In the Medical Service Business, human resource development and technologies will be improved to enhance business growth. Air Water will strive to expand the volume of businesses and range of clients by expanding the scope of its areas of business activity to recovery and chronic stage segments which are growing markets, and also clinic and home/nursing care facilities. Furthermore, by promoting M&A, Air Water will create new businesses while strengthening existing businesses, and will strive to promote businesses that accurately capture key medical needs

#### Medical Services

Through the SPD service, which involves accepting contracted responsibility for the logistics management of all pharmaceuticals and medical instruments within a hospital the contract sterilization service, which involves the sterilization of medical instruments, and other services, Air Water helps create an environment where hospital staff can focus on providing healthcare services, which is extremely vital given the increasing shortage of medical professionals.



Okadama Sterilization Cente

It offers contract sterilization services with the option of having specialized staff visit hospitals to conduct high-quality sterilization on-site and the use of contract sterilization centers located across the country.

Moreover, in April 2016, Air Water Medieth was established to integrate the sterilization and SPD businesses. As a comprehensive hospital service company, Air Water Medieth has SPD distribution bases in Tokyo and Osaka, as well as 13 off-site sterilization centers across Japan, that enable it to provide a higher level

of support to a broader range of medical institutions. In regional medical services, Air Water engages in the sale and rental of home care and nursing care goods, and the management of nursing care facilities in Matsumoto, Yamaguchi and elsewhere that combine the various technologies and expertise of the group.



Lifestyle Assistance Cente



#### Medical Equipment

In the Medical Equipment sector, Air Water has expanded its range to include hyperbaric oxygen chambers, in which it has a high domestic market share, and other ventilator-related equipment that is closely connected to medical gas, as well as cardiovascular, nursing care, dental, and other medical instruments for which it offers distribution and maintenance services. In particular, it boasts strengths in medical equipment related to infant/child/perinatal care. The company's strengths are in the infant/child/ perinatal fields. The nitric oxide formulations INOflow and its control system INOflo DS and INOvent are used to improve pulmonary hypertension in the perioperative period for heart surgery and hypoxic



respiratory failure associated with neonatal pulmonary hypertension. Moreover, it is now selling the Fabian Series ventilator, and carefully selects other superior medical equipment from around the world and introduces them to the Japanese market.

As one of its nursing care instruments, Air Water manufactures and sells the "Viami®" series of shower

equipment for nursing care use, enabling comfortable showering for both the care receiver and the caregiver. It also conducts a number of other wide-ranging businesses such as the manufacturing of metal and resin materials for use in dentistry. and their fabricating equipment as well as hypodermic needles.



" shower system for nursing care use

#### Konatsu 3SP, an innovative home oxygen concentrator supporting

Konatsu 3SP, released for rent by Air Water in January 2015, is a home oxygen concentrator that realizes overwhelmingly low power consumption in a compact, lightweight design. Air Wate developed an innovative compressor, which is the core of the oxygen concentrator, and added wheels to the main unit to ina the need for an extension tube to send oxygen. Konatsu 3SP helps to alleviate the day-to-day hassle felt by patients, and is particularly popular with children with heart diseases. C the number of patients requiring home care with oxyge



# **Energy Business**

#### **Review of FY2015**

In the Energy Business, supply-demand balance fluctuated significantly due to factors such as the slowing Chinese economy and the shale gas revolution. This, combined with a fall in crude oil prices, saw a decline in the market price of Air Water's flagship product, LP gas, which resulted in significantly lower net sales. Meanwhile, thanks to measures such as expansion of direct-sale customers through the acquisition of commercial rights, the introduction of new services with WAON points, the acquisition of new users through the sales promotion of the VIVIDO hybrid hot water supply and heating system, and the push for fuel conversion and increased sales of industrial LP gas, the Energy Business was able to achieve higher sales overall. The Kerosene Business promoted supplementary sales to LP gas users. Additionally, the sales of LNG tank trucks to Japanese LNG stations progressed steadily.

#### **Outlook for FY2016**

In the Energy Business, grasping the start of market competition brought about by the deregulation of electricity and gas as an opportunity, Air Water will aim to create business models utilizing its proprietary technologies, services and infrastructure in all areas to emerge as a comprehensive energy company with a regional presence and establish a solid foundation in this key area. While crude oil prices continue to fluctuate mildly in FY2016, the prediction is that it will remain low, as was the case last year. Amidst such trends, in energy for daily life, Air Water's customer development approach will aim to create closer links with users by expanding business territory and enhancing services. In energy for industrial use, in addition to manufacturing LNG equipment, which holds a high share owing to engineering utilizing cryogenic technologies, and the development of other applications, Air Water will present energy proposals to users of industrial and medical gas in an attempt to create synergies surpassing the boundaries of individual businesses. With these measures as essential elements, Air Water foresees steady growth in its businesses

incorporating regional characteristics.

#### LP Gas and Kerosene

Under the Hello Gas brand, Air Water delivers fuel energy essential to both regional communities and industry, such as household use, industrial use, factory use, vehicle use and so forth, primarily in the Hokkaido region. Since it became a pioneer of LP gas sales in Japan in 1955, Air Water has expanded its businesses deeply rooted in regions through services backed by a long track record and multiple supply bases.

The LP gas supplied to customers is distributed from Air Water's

secondary facilities (large-sized LP gas storage tanks). Air Water has established an alliance framework that enables it to provide comprehensive services, from filling to delivery.



#### Natural Gas Pipeline Distribution

Natural gas from the Yufutsu gas field in Tomakomai, Hokkaido, which boasts some of the largest reserves in Japan, is pumped down Air Water's

own gas pipeline to the Chitose Natural Gas Distribution Center in the Chitose Rinku Industrial Complex to provide a stable supply to companies in the industrial park.

Through the supply of natural gas, a source of clean energy following LP gas, Air Water will contribute to the advancement of regional industry.



Supplying natural gas via pipeline

#### **Energy Equipment**

With a focus on "best energy mix" proposals that combine LP gas with other energy sources, Air Water offers VIVIDO, a hybrid hot-water supply and heating system that integrates an electric heat pump with highly efficient gas water heater. Over 2,500 VIVIDOs have been sold for general household use as a clean energy solution.

Air Water also proposes other optimal energy equipment to suit various applications.



VIVIDO hybrid hot-water supply and heating system



Energy saving and space saving

#### **Fuel Conversion**

In recent years, Air Water directs its efforts in fuel conversion to industries and proactively urges its customers to shift away from heavy oil by proposing alternatives.

By leveraging the characteristics of LP gas, a form of dispersible energy that can be supplied during emergencies and a form of clean energy with less CO<sub>2</sub> emissions than other fossil fuels, Air Water contributes to fuel cost reductions, stable supply, and the prevention of global warming. Converting energy to LP gas



#### LP Gas-type Mobile Power Source Cars

The Air Water lineup includes the Container Type, which is capable of supplying 100 kW of electricity through LP gas power generation (for around 40 households), the Light Vehicle Type (power output: 9.8 kW), which has excellent mobility, and the Power Generation Unit-Equipped Type (50 kW or 9.8 kW), which comprises a truck equipped with a power generator. In addition to equipping its own LP gas filling stations with

these vehicles as a measure to achieve business continuity during emergencies such as disasters, Air Water is expanding the sales of such products as emergency power sources for companies and local governments, and promoting introduction through major fuel suppliers.



Power source cars dispatched during a blackou



#### LNG Transport and Storage Tanks

Air Water is a domestic pioneer in LNG transport and storage tank technology. In the field of LNG transport equipment, it offers LNG transportation containers that it has developed to meet a wide range of transportation needs, including monocoque tank trucks that are specialized for high-volume inland transport, inland and marine transportation tank containers, and inland and rail transportation tank containers. Air Water also utilizes the cryogenic technologies and expertise it has cultivated in the Industrial Gas Business for its LNG storage tanks to provide advanced engineering services for the actualization of optimized LNG satellite hubs (storage and vaporization delivery facilities) that match user needs, from the selection of storage tanks to facility layout.



LNG tank trucks



40-foot tank containers

# Supporting consumers' lifestyles in a visible way through

In October 2015, Air Water began awarding WAON points according to the amount of LP gas purchased. This is the first case of WAON points being directly awarded for the utilization of daily energy sources such as electricity and LP gas, and the initiative is being well received. Furthermore, beginning this summer, Air Water will introduce the WAON point system to its kerosene business in Hokkaido, and expand coverage of LP gas to the Tohoku and Kanto regions. Air Water will continue to ro out services essential to everyday life.



# Agriculture and Food Products Business

#### **Review of FY2015**

Of the businesses that form the Agriculture and Food Products Business, the Beverage segment faced harsh conditions primarily due to inventory adjustment by users. Meanwhile, other segments made steady progress as planned: Ham, Delicatessen and Frozen Foods, which is mainly aimed at commercial users; Agricultural Produce and Processing, which achieved stable procurement of raw ingredients; and Agricultural Machines, which recovered following the backlash generated by the consumption tax hike. Moreover, with the addition to the Group of KYUSYUYA Co., Ltd., a fruit and vegetable specialty store with locations across Japan, in the second quarter, and of Takaya Shoten, a wholesaler located in a public regional wholesale market in Otsu, Shiga Pref., in the third quarter, business expanded. This move has enhanced the Air Water value chain from cultivation to procurement, processing and sales, and enabled wider geographic coverage. Synergies have also been created within the Group such as by incorporating beverage products into the fruit and vegetable export routes of KYUSYUYA, and Air Water promoted initiatives for new business development through the expansion and collaboration of inter-Group transactions.

#### Agriculture

Air Water Farm Agricultural Production Corporation operates two farms: the Chitose Farm, which produces fresh tomatoes and leafy vegetables in one of Japan's largest greenhouses, and the Azumino Farm, a base for tomato production in Nagano Prefecture. These farms automatically regulate greenhouse temperature, sunlight, irrigation and other environmental factors via a compound environmental control system to create an environment that suits the cultivation of vegetables, allowing for a stable year-round supply of safe, high-quality vegetables. In addition,

Air Water exploits its merits as an industrial gas manufacturer to the fullest extent, for example by working with the Research and Development Institute to develop systems to control the concentration of CO2 in greenhouses in order to create the optimal state for growing vegetables.



Air Water Farm Agricultural Production

#### Agricultural Machines and Tools

Nichinoki Seiko Co., Ltd. and Hiroshi Industrial Co., Ltd. manufacture and

sell agricultural machines and tools that support Hokkaido's agricultural industry. Each company offers its own distinctive products and services, and makes maximum use of the business network formed over the years to strengthen and expand synergies with the Air Water Group.



Nichinoki Seiko Co., Ltd.

#### Fruit / Vegetable Distribution and Processing

Tomiichi Co., Ltd. has signed cultivation contracts with over 250 farmers in Hokkaido. The company offers 20 different types of seasonal fruit and vegetables, including potatoes, pumpkins, and daikon radishes, as well as frozen vegetables and other processed foods to major food product manufacturers and other customers around the country. Moreover, thanks to Hayashiya, with its strength in frozen vegetables such as pumpkin and sweetcorn, and Tayaka Shoten, a market wholesaler located in Otsu, Air Water now has the expertise and a broad distribution network for conducting everything from raw ingredient procurement to processing, freezing and

inspection within the Group, and thus expanding the company's unique food valu chain



#### Sales of Fruit & Vegetables

KYUSYUYA, renowned for its premium, carefully selected fruit and vegetables, and the operator of the largest chain of fruit and vegetable specialty stores in Japan, runs specialty retail stores and supermarkets.

With a strong focus on face-to-face customer sales, it offers only the best seasonal produce harvested from fields throughout Japan, and delivers safe and secure farm produce with authentic flavor and freshness.



**Outlook for FY2016** 

For the Agriculture and Food Products Business, the Air Water Group will unite to form a chain of services based on the concepts of "From the field to the dining table" and "Building a value chain that fully utilizes the Earth's bounty," in the areas of agricultural produce, livestock-derived products, beverages, water for home delivery and peripheral areas.

To achieve this, Air Water will continue to expand synergistic effects between Group companies and strengthen business through M&A activity. The Company will promote the building of relationships through proactive interaction not only between Group companies but also with trading partners and producers in an aim to promote sustainable and stable business. While ensuring that all unique companies commit to the advancement of Air Water's business, synergies with existing businesses will be aggressively pursued through strategic M&A. Furthermore, with the welcoming of fruit and vegetable retailer KYUSYUYA Co., Ltd., into the Group, Air Water will seek to better understand markets from the perspective of the consumer and enhance efforts in technological development through collaboration with the Research and Development Institute.

#### Ham, Delicatessen and Frozen Foods

Saveur SS Inc. offers three brands: Saveur commercial frozen food ingredients that have received great acclaim from hotels and upscale restaurants in Japan, Syunsetsu ham and delicatessen products for the general consumer market, and Sagami Ham, which has strong brand prestige in Kanagawa Prefecture and the surrounding southern Kanto region. In addition to its uncured ham, which boasts the top share in the domestic market, it offers a broad range of high-quality frozen foods such as broccoli and asparagus that retain their taste and freshness through cryogenic technology. The company is also working actively to take on new fields such as cooking sauces and Hokkaido sweets.





Saveur SS Havakita Plan

# TOPICS 19 AIR WATER ANNUAL REPORT 2016

#### Fruit and Vegetable Juices

Gold-Pak Co., Ltd. has provided high-quality beverages such as fruit juices, vegetable juices and natural spring water for many years. It continues producing highly reliable products made from domestic ingredients and with great consideration given to both taste and safety. Based on the corporate philosophy of "Untiring Effort to Achieve Good Taste," Gold-Pak continues to produce beverages chosen by consumers

with agricultural produce processing technology that brings out the intrinsic taste of natural ingredients while placing importance on the universal values of farming.



#### AW-Water (home delivery drinking water)

AW-Water manufactures and sells pure water filtered with reverse osmosis (RO) membrane technology, mineral water made from and distilled water collected in the salt refinement process to which

marine-derived minerals have been added, and natural water, which is bottled high-quality subterranean water from Japan's Northern Alps. These water products are delivered as a set with Air Water's servers to households and business offices AW-Water also engages in the Suigensui business of delivering water nationwide through the postal service.



AW-Water's Northern Alps mineral wate

#### Integration of the largest food processing factory in Hokkaido's Tokachi region into the Air Water Group

n August 2016, Air Water acquired the Tokachi factory of Maruha and industrial canned food, as well as the processin etables such as pumpkin and Chinese yam. Air Wat vith existing businesses and enhance the lineup o



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# **Other Businesses**

#### **Review of FY2015**

In the Seawater Business that produces unique premium products derived from seawater resources, the Salt segment experienced a significant decline in the sales of antifreeze salt for roads due to a warm winter, contributing to an overall drop in sales. However, cost cuts and increased electricity sales in the Biomass Power Generation segment resulted in steady performance. In the Magnesia segment, the sales of magnesia for electromagnetic steel sheets were favorable. Moreover, in August, Air Water acquired Ozark, a U.S. company specializing in magnesia ceramics. In the Logistics Business, a decline in the cost of diesel contributed to cost reductions. Finally, the Aerosol, O-ring and ECOROCA segments basically performed as planned, which promoted the Air Water Group's unique management strategy of the Order Rodentia Style of Business.

#### **Outlook for FY2016**

While all Group companies engaged in Air Water's Other Businesses are SMBs, each offers agility and flexibility and has grown through various forms of collaboration within the Group. Air Water will continue aiming to contribute to the sustainable and stable development of the Group by searching for growth areas and creating new businesses.

In the Seawater Business, Air Water will concentrate on acquiring new customers for the Salt segment while aiming to expand the application of products and building a second pillar of the Environment segment. In the Magnesia segment, efforts will be concentrated toward achieving optimal production through a two-factory system and strengthening the ceramics business, following on the lead of electromagnetic steel sheets. For the Logistics segment, Air Water is considering the formation of a value-added logistics network toward future growth. Finally, in the Power Generation segment, which is scheduled to become profitable from 2019, Air Water is making steady preparations to secure stable and inexpensive power in Hofu City, Yamaguchi Prefecture, and Iwaki City, Fukushima Prefecture.

#### Seawater (Salt / Magnesia)

#### <Salt>

Nihonkaisui, Co., Ltd., the leading company of salt produced in Japan, develops a variety of salt products, from table salt and food-processing salt manufactured at the Ako and Sanuki plants to snow-melting salt and boiler salt. It also exerts efforts towards the proactive utilization of seawater resources and technologies



Salt for general household

to offer environmental products, such as the READ-F adsorbent for water and soil treatment, and magnesium hydroxide. It is working to expand its business range to cover fields such as potassium chloride and other agricultural businesses, the electric power business, and the sewer pipe reclamation business.

#### <Magnesia>

Tateho Chemical Industries Co., Ltd., an international magnesia brand, uses one-of-a-kind technology to produce highly functional, high value-added magnesia compounds and ceramic products that have seawater-derived bittern and mineral magnesium as their primary

ingredients, 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.



Single-crystal magnesi

#### Logistics

Air Water Specialized Transportation Inc. 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. In the General Cargo segment, it offers a plethora

of services to meet customer needs, from container transport to transportation of small- and medium-sized cargo lots through shared distribution channels and 3PL. It also designs and manufactures specialty vehicles that are optimized for each individual purpose.



#### Aerosol

Air Water Sol Inc. has the advantages of a production system based on three plants in Japan and a research and development capacity that covers numerous fields. It supplies a diverse range of aerosol products via OEM, including everything from coating materials and automotive parts to

cosmetics, quasi-drugs, and household commodities. It is also working to strengthen the development of products such as UV protection sprays and disinfectant and washing solutions under its own brand, and to reform its business structure, for example, by entering overseas markets and adding a liquid filling company to the Group.



Air Water Sol Inc. brand products

NV (metal surface treatment)

Air Water NV Inc. uses its own unique metal surface treatment technologies to provide solutions such as NV nitriding, which provides high-guality surface treatment for steel materials, and Pionite, which increases the hardness of stainless steel without compromising corrosion resistance.

It is developing and expanding its business not only in Japan but also in regions of China and Southeast Asia



#### O-rings

Air Water Mach Inc. manufactures and sells all types of seals such as JIS standard rubber O-rings and rubber products for industrial use. It offers a lineup of its own finished products for various industrial fields, including ultrahigh-performance rubber O-rings for semiconductors and LCD

manufacturing systems. Moreover, it is leveraging its technological strengths to expand production and sales in the growing markets of China and Southeast Asia.



Rubber O-rings

TOPICS

#### ECOROCA<sup>®</sup> (artificial recycled wood)

Air Water ECOROCA Inc. manufactures and sells ECOROCA®, a new compound, recycled material made from used wood and plastic. It has launched a new product with static electricity prevention as decking material. In addition, as an eco-friendly building material with excellent strength and safety that

maintains the texture of the wood, it is used in an expanding range of applications such as louvres and walls primarily in public facilities.



#### 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 is the first in the world to successfully establish a technology for large-diameter

substrates of up to 8 inches and mass produce the substrates as the most suitable for the growth of GaN (gallium nitride).



# Tateho Chemical Industries, the key player in Air Water's Magnesia segment, opens a new plant in Kitakyushu City

electromagnetic steel sheets. The move seeks to meet the growing demand for magnes



# Producing results in R&D directly connected to businesses, from industrial fields to human-related fields

Air Water Inc. envisions itself as a "technology-driven company," and the scope of its development activities ranges from technologies focusing on traditional industry and energy-related fields to those serving people, such as healthcare, agriculture and food products. Accordingly, the Company works to realize creative technological synergies in a wide range of technology areas.

The Research and Development Institute has two research bases as its core, one each in Matsumoto City and Sakai City, where engineers take advantage of diverse cutting-edge technologies and state-of-the-art research facilities while working

#### **R&D** team organization

Sakai Institute Helium gas Development of new food preservation technologies purifying equipment Flexible organization based (Agriculture & Food Company on teams by development theme **Research and Development Institute** Cross-thematic development project Development of gas pharmaceutical products/ LNG pump Development project tailored to regional needs nursing care equipment (Medical Company) Matsumoto Institute Package substrate: Matsumoto Institute GaN/SiC substrates Sakai Institute Sakai Institute (SiC Division (Chemical company Gas processing technologies Electronic materials technologies Medical technologies Gas collection/recycling technologies Metal surface treatment technologies Energy utilization technologies R&D Energy solution technologies Gas application technologies Agriculture and food products technologies areas Welding technologies Fine chemical and new materials technologies Plasma surface treatment technologies Functional resin and carbon materials technologies

closely with other divisions to support technological development for the entire Group. Furthermore, strategic development projects are flexibly organized according to growth strategies and regional needs, enabling the Group to develop unique technologies that differentiate its products from those of competitors.

Air Water promotes strategic R&D with a focus on sustainable growth both by producing new growth drivers through technological integration across different businesses that takes advantage of the latest high-standard technologies possessed by each division, and by proactively working with academic institutions and research organizations.



#### Major R&D achievement in FY 2015: COURSE50

CO2 Ultimate Reduction in Steelmaking Process by Innovative Technology for Cool Earth 50 (COURSE50) is a project run by the New Energy and Industrial Technology Development Organization (NEDO) with the aim of reducing CO<sub>2</sub> emissions by 30% throughout the steelmaking process. In FY2015, a testing blast furnace was constructed, marking the beginning of the validation process for CO2 reduction effects.

Air Water Inc. was responsible for facilities that supply the mixed gases to the test blast furnace, and successfully developed a technology to extract 98% high-purity CO gas from a low-purity CO source containing N2 (blast furnace gas). Moving forward, the Company hopes to continue meeting the need to purify gas from various sources, and contributing to initiatives for reducing environmental burden.

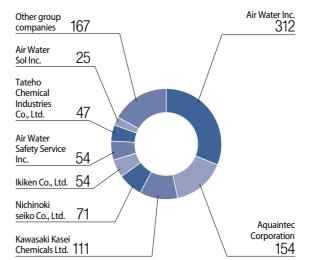
#### Intellectual property strategy

The Intellectual property division has a mission to lead the Air Water Group's intellectual property (IP) strategy and serve as the core of all Group companies' IP activities. Under the slogan "Improving the Air Water Group's business competitiveness through IP activities," the division carries out strategic initiatives together with development and business divisions.

Staff members with specialized knowledge are entrusted with IP management for all Group companies, and have in place a process for ensuring that the acquisition, maintenance and management of rights are properly performed, that IP is maximized in business revenues, and that IP-related business risks are minimized. Another key initiative is IP education, where the division uses original training programs and internal newsletters to enhance knowledge and awareness of IP throughout the Group.

Patent applications are an integral part of the Company's IP strategy. Based on a survey of earlier technologies, a full assessment is performed of the patentability and commercial

#### Number of patents held by Group companies



#### 23 AIR WATER ANNUAL REPORT 2016



RSE50 blast furnace gas purifying facilit

viability of inventions, and only those that fulfill internal criteria are put through the application process. Furthermore, taking into account the status of R&D and the usage of patents in business an annual review is conducted to re-evaluate the ever-changing value of patents and re-organize all patents held. The aim is to build an IP portfolio best suited to R&D and business strategies and ensure that it contributes to improvements in business revenues and enterprise value.

The Air Water Group comprises companies with advanced technological development capabilities different from those of the Research and Development Institute, with patents held in various business fields. This fact plays a key role in the Company's All-Weather Management System and Order Rodentia Style of Business.

In future, Air Water looks forward to all Group companies introducing further groundbreaking IP, and to making even more effective use of IP, including already approved patents, toward implementing an all-Air Water IP strategy.

Industrial gas	Cryogenic separation, absorption/separation, gas nitriding control, fuel gas generator for gas cutting, atmospheric pressure plasma processor
Chemical	Electronic materials (phenolic resins, epoxy resins), carbon materials (thermally expandable graphite), pharmaceutical/agricultural chemical intermediates
Medical	Medical household oxygen/concentrator, ventilator, operating room facilities, artificial denture composition
Energy	Standing LNG pump, LNG tank truck, hybrid hot-water supply and heating system, LP gas mobile power source vehicle
Agriculture and Food Products	Crop harvester, crop cleaning equipment, water cooler
Other Businesses	Semiconductor substrate materials, water treatment systems, magnesia materials, artificial wood products using recycled materials, aerosol

#### Major products covered by patents

# COMPANY

Constantly Creating Value as a Corporate Group Needed and Trusted by Society



**ESG** Information

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# Creating Value through Business



# p31-32

# Group Information



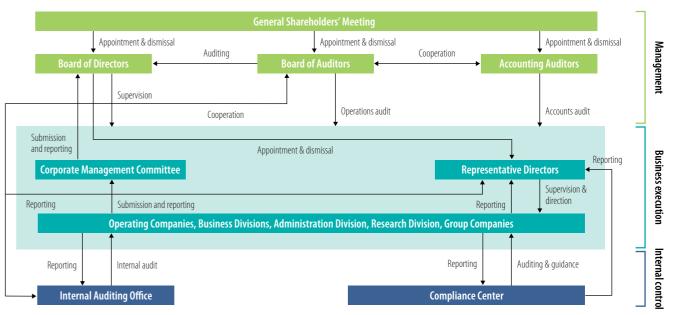
# **Corporate Governance**

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

#### 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 18, 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

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.

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, while the Corporate Communication Office, which also covers investor relations, 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.

#### Contributing to the Environment and Society through Business

# Niigata f Azumino City Matsumoto City

# Using wood biomass power generation to take on new renewable energy business models

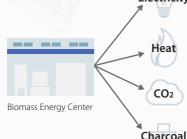
The Air Water Group is also focusing its strengths on the electric power business in order to help resolve environmental and energy problems. In May 2016, the Company's Azumino Farm in Azumino City, Nagano Prefecture, commenced operation of a cogeneration system that utilizes wood biomass. The goal is to revitalize the region through resource circulation based on a "local production for local consumption" approach.

# Aiming for "tri-generation" utilizing not only electricity but also heat and carbon dioxide

Azumino Farm is located in the foothills of Japan's Northern Alps, where Air Water Group company Air Water Farm Co., Ltd. grows tomatoes since 2011. Beginning in May of this year, Azumino Biomass Energy Center began operations at this Azumino Farm.

Biomass power generation utilizes renewable organic resources derived from flora and fauna as fuel, and Azunimo Biomass Energy Center specifically uses unused timber created from forest thinning in the region as its energy source. Timber procured from the region is taken to the chipping plant inside the center, where it is processed into fine chips, dried and then gasified in special-purpose equipment. It is then fed into a cogeneration system that simultaneously supplies heat and generates electricity with a power output of 1,900kW. The cogeneration system at Azumino Farm can supply 1.1 million kWh per annum, which is equal to the amount of electricity consumed by approximately 3,000 households. The generated electricity is sold to Chubu Electric Power Co., Inc. to help cover the center's operating costs.

The cogeneration system produces 3,800kW of heat, or twice the amount of electricity generated, and this heat is used to create hot water that is used for growing tomatoes in the adjacent greenhouses. The Air Water Group is currently conducting studies into the utilization of CO<sub>2</sub> released during combustion for promoting photosynthesis in tomatoes. In future, it aims to achieve tri-generation, which utilizes electricity, heat and CO<sub>2</sub>.



**Electricity** Sold to a power company and applied to the running costs of the Biomass Energy Center.

Used to heat the greenhouses. Reduces energy used at the farm by about 50%

Used to accelerate plant photosynthesis. (currently under verification)

Under consideration for use in the environment-friendly building material ECOROCA.



Biomass Energy Center

# Effectively utilizing wood from forest thinning, a local concern

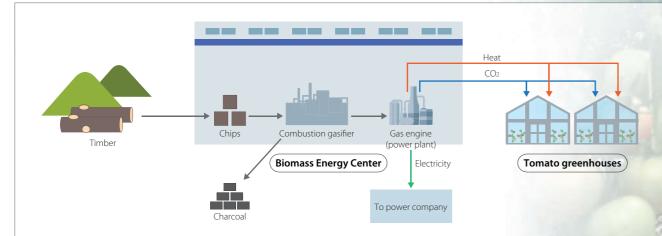
Since the feed-in tariff (FIT) system was launched with the aim of popularizing renewable energy in 2012, wood biomass power generation projects have been established throughout Japan. However, many of these projects are contending with the major problem of securing a stable supply of wood chips to their suit respective power generation scales. To that end, the Center is collaborating with the local forestry industry to build a system for maintaining stable procurement of around 25-27,000 tons of timber a year for combustion.

Nagano Prefecture, about 80% of which is covered in forest, has a history of utilizing timber in all aspects of daily life. However, with the



Timber center

Tri-generation configuration for wood biomass power generation



continuing decline in timber prices and the increases in forestation and logging costs, there are more and more forests being left unmanaged. Moreover, a severe outbreak of pine weevils in the prefecture has caused many trees to wither.

Air Water's Azumino Biomass Energy Center purchases unused timber from thinning and insect-damaged trees from the local forestry cooperative, and turns it into an energy source, thus significantly contributing to the revitalization of the local forestry industry.

# Utilizing valuable local resources to help create a sustainable society

The Azumino Biomass Energy Center seeks to create a new business model through "ultimate resource circulation," which fully utilizes the valuable natural resource of unused timber.

In efforts to waste nothing, the center even uses the charcoal created when gas is generated from the wood chips as fuel to dry the wood chips. Moreover, the Air Water Group is considering utilizing some of the charcoal as raw material for producing ECOROCA, an environmental building material made from recycled timber and recycled plastic manufactured by Air Water Ecoroca Inc.

Japan's farming and mountain villages face serious concerns related to depopulation, an aging society and the economic decline that stems from these factors. To revitalize such regions, it is necessary to utilize the resources unique to the areas, for both farming and forestry industries, and create frameworks capable of stimulating the local economies. Through the initiatives in Azumino, the Air Water Group hopes to contribute to regional development and stable employment by promoting a sustainable farming industry and effectively utilizing forest resources.

#### Contributing to the Environment and Society through Business

# Contributing to local communities by securing a lifeline during natural disasters with swift response through Group cooperation

Beginning with industrial gas, a critical component of social infrastructure, Air Water's diverse businesses play an important role in society. Air Water's management philosophy contains the sentiment "We dedicate ourselves and our resources to the creation and development of business." In order to stay true to this, the Company focuses its resources on mitigating even the hard-to-avoid risk of natural disasters and endeavors to fulfill its corporate social responsibility.

#### Building a Group network strong against disasters by leveraging the experience of past natural disasters

The Air Water Group has leveraged its experience with natural disasters, namely the Great Hanshin-Awaji Earthquake of 1995 and the Niigata Chuetsu Earthquake of 2004, to build a nationwide network strong against disasters, expand on products and services helpful during disasters, and accumulate disaster response know-how, all through group cooperation.

The ability of the Air Water Group to respond to disaster was demonstrated in various ways in the Great East Japan Earthquake of 2011. The magnitude 9.0 earthquake, the largest ever recorded in Japan, and the giant tsunami that followed, caused a halt in operations at multiple liquefaction gas plants across the Kanto and Tohoku regions due to equipment damage and power failures, and at many gas filling plants around the country due to power and water outages. In response to this crisis, Industrial Gas Company prioritized the tasks of securing medical oxygen and supplying nitrogen gas to protect against explosions, supplementing supplies from the Kanto and Koshinetsu regions to Tohoku. The VSU network played a major role at this time. The VSU in Niigata (Niigata Ekisan) became a key supplier of gas to the Tohoku region and took action to send gas to disaster-struck areas via piston transportation, while the VSU in Nagano (Shinano Ekisan) supplemented Niigata's gas supply. The Sagamihara and Shizuoka VSUs supplemented gas supply to all areas of the Kanto and Koshin regions, thus decentralizing the supply base and minimizing impact on customers.

Meanwhile, Air Water Group Medical Company endeavored to ascertain the damage at medical institutions across the country, and delivered compact oxygen tanks and oxygen condensers used for home care patients and during transportation to hospitals to affected regions, ensuring a continuous, stable supply of oxygen even during the emergency. Air Water Logistics utilized its strength of providing a myriad of logistics services through its nationwide network to swiftly deliver food and medical supplies sent from around the country to disaster-stricken areas



Emergency vehicle during a disaster (Kumamoto Earthquake

Six months after the Great East Japan Earthquake, Life Solution & Energy Company developed Japan's first LPG gas-based mobile power source vehicle. By leveraging the mobility of LP gas, Air Water has deployed this to its in-house production sites across Japan as a mobile power source capable of supplying power to facilities experiencing power outages during disasters

#### Air Water Group's response capability



#### New Vibration Testing Center capable of conducting seismic safety tests of the highest standard in Japan

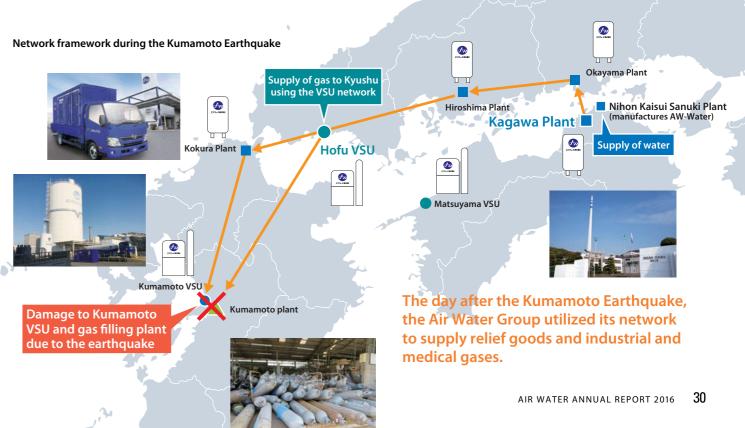
In April 2016, Air Water Safety Service Inc. commenced operation of the Vibration Testing Center, equipped with a system using tri-axial simultaneous excitation for conducting seismic tests of the highest standards in Japan. The demand for major facilities to ensure seismic resistance is intensifying, and yet currently there are very few large testing facilities in Japan with tri-axial simultaneous excitation equipment necessary for earthquake countermeasures. The new center makes it possible to promptly respond to customers for whom vibration testing is critical. Additionally, Air Water Safety Service conducts vibration testing on fire extinguishing systems and medical equipment the Company manufactures, thus resulting in products and services with even greater safety and reliability.

#### Supporting disaster-affected areas during the Kumamoto Earthquake of April 2016 through the Air Water Group network

The Air Water Group's ability to mobilize was also notable in the wake of the Kumamoto Earthquake of April 14, 2016. In this particular large-scale earthquake, Chugoku-Shikoku Air Water, Kyushu Air Water and Air Water Safety Service acted as leaders in taking emergency action through mutual cooperation

Immediately after the earthquake struck, a support framework was established that designated the Kokura Plant as the supply base for gas and goods, and the VSU and sales office in Uto City, Kumamoto Prefecture, as the frontline bases. On April 15, the day after the foreshock earthquake, personnel and relief supplies were brought together from other parts of Kyushu, and then on the 16th, when the mainshock struck, cylinders of oxygen and other gases along with drinking water produced by the Group was loaded onto trucks and transported from Shikoku to Kyushu via Chugoku. In addition, 15 tankers were dispatched from the Hofu VSU and 6 from the Kokura Plant to transport gas to the affected areas in Kumamoto. However, there has to be power to drain the tankers. This was where the LPG gas-based mobile power source vehicles developed by Air Water played a major role. Power was secured using a total of two such vehicles: one stationed in Kumamoto and another sent from Shikoku.

Efforts were made to provide a stable supply of medical gases to hospitals through a liaison with the Engineering Department, and Air



Water Safety Service inspected medical institutions, after which it dispatched emergency support teams to hospitals affected by the earthquake, and worked to provide support to maintain the medical system.

The Air Water Group hopes to continue to be a company that society can depend on by leveraging its manufacturing bases and nationwide network to harness the combined strength of the Group's diverse companies and support lifelines essential to industry and everyday life.



# 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 hopes to keep alive the entrepreneurial spirit that has been continually passed down, and engage in businesses that are half a step ahead of the times.



#### 2010

• The Next-2020 Ver.1 medium-term business plan is formulated with the aim of achieving net sales of 1 trillion yen in FY 2020

#### 2011

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



#### 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
- Kyushuya Co., Ltd., Japan's largest fruit and vegetable retail chain operator, is acquired



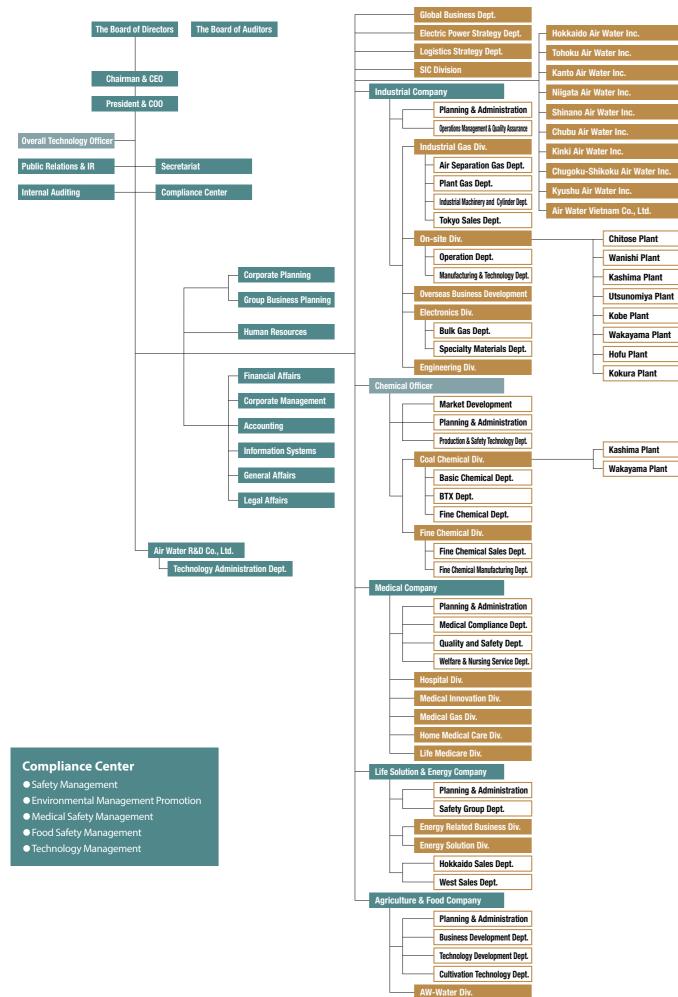
#### 2010

Great East Japan Earthquake Yen falls to historical low of ¥75 to the dollar Consumption tax rate raised to 8% Kumamoto Earthquake





#### Organization Chart (As of August 1, 2016)



#### Corporate Information | Board of Directors | Shareholder Information

Corporate Outline	(As of March 31, 2016)
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	11,334 (Consolidated)
URL	http://www.awi.co.jp/english/

Chairman of the Board	Masahiro Toyoda	Chief Executive Officer		
President	Yasuo Imai	Chief Operating Officer		
President	Tasuo IIIIai			
Vice President	Kikuo Toyoda	Chief Representative for Tokyo Operations President, Medical Company		
	Akira Fujita	Chief Representative for Hokkaido Operations		
	Yuu Karato	Finance & Administration Officer, Chemical Office		
Senior Managing Director	Yukio Matsubara	President, Industrial Company		
	Masato Machida	President, Agriculture & Food Company		
	Kiyoshi Shirai	Corporate Planning Officer General Manager, Corporate Planning		
	Hideo Tsutsumi	General Manager, Business Planning		
Managing Director	Minoru Nagata	General Manager, Kanto Branch President, Kanto Air Water Inc.		
	Yukio Murakami	Chief Representative for Shinshu Operations President, Shinano Air Water Inc.		
	Kensuke Yamamoto	Power Business Strategy Officer, Global Business Director		
	Yasushi Sogabe	General Manager, Hokkaido Branch President, Hokkaido Air Water Inc.		
	Masayuki Hasegawa	Managing Director, Technology Management		
Corporate Director	Kazuhiko Hatano	Corporate CSR Officer; General Manager, Compliance Center		
	Kosuke Komura	Human Resources Manager		
	Yukiko Sakamoto	Independent Director		
	Yoji Arakawa	Independent Director		
	Hirohisa Hiramatsu	Standing Statutory Auditor		
	Kouichi Nakagawa	Standing Statutory Auditor		
Auditor H	Hiromi Yanagisawa	Standing Statutory Auditor		
	Akihiko Takashima	Corporate Auditor (part-time)		
	Atsushi Hayashi	Corporate Auditor (part-time)		

Principal Shareholders	(A:	s of March 31, 2016)	
Company	Number of shares held (thousands)	Ratio of shares held (%)	
Nippon Steel & Sumitomo Metal Corporation	10,000	5.10	
The Master Trust Bank of Japan, Ltd. (trust account)	9,174	4.68	
Sumitomo Mitsui Trust Bank, Limited	7,936	4.05	
Japan Trustee Services Bank, Ltd. (trust account)	7,197	3.67	
JP MORGAN CHASE BANK 385632	6,466	3.30	
Sumitomo Mitsui Banking Corporation	6,196	3.16	
Air Water Customers' Stockholding	5,401	2.75	
National Mutual Insurance Federation of Agricultural Cooperatives	4,179	2.13	
The Hokkaido Bank., Ltd.	4,113	2.10	
North Pacific Bank, Ltd	3,874	1.98	

Information on Shares	
Fiscal Year	From April 1 to March 31
Annual General Meeting of Shareholders	June
	Annual meeting: March 31
Record Dates	Year-end dividends: March 31
	Interim dividend: September 30
Number of Shares per Unit	100 shares (As of October 1, 2016, the number of shares per unit was altered from 1,000 shares to 100 shares.)
Manager of the Register of Shareholders	Sumitomo Mitsui Trust Bank, Limited. 4-1, Marunouchi 1-chome, Chiyoda-ku, Tokyo, Japan
Telephone Number for Inquiries	TEL 0120-782-031 (toll-free in Japan)
URL	http://www.smtb.jp/personal/agency/index.html
	Electronic public notice
Method of Public Notice	*URL depicting public notice
	http://www.awi.co.jp/ir/koukoku.html
Listed Financial Instruments Exchange	Tokyo, Sapporo