AIR WATER REPORT 2019



Meeting society's needs with nature's blessings

Management Philosophy

Backed by an entrepreneurial spirit, we dedicate ourselves and our resources to the creation and development of businesses linking air, water, and the earth.

The origins of the Air Water Group's business can be found in its name,

which consists of two words: "air" and "water."

We make use of the resources of our precious earth to create businesses and contribute to society and everyday life.

Amid a business environment that continues to change at a dizzying pace,

we will continue to leverage the group's collective capacities to tackle problems faced by

our customers and society, and will rise to the challenge of creating new value.

Contents

- 01 Management Philosophy
- 03 Timeline of "Value Creation" to Enrich Society
- 05 Meeting Society's Needs with Nature's Blessings
- 07 CEO Message
- 10 COO Message
- 13 Air Water's Business Foundation and Growth Strategy
- 15 Rooted in and Growing with Local Communities
- 16 Creating Social Value through Business Activities
- 17 Feature 1: Using Renewable Energy to Generate Electricity
- 19 Feature 2: Using the Gift of the Sea for Everyone's Benefit

Business Overview

- 21 Industrial Gas Business
- 23 Chemical Business
- 25 Medical Business
- 27 Energy Business
- 29 Agriculture and Food Products Business
- 31 Logistics Business33 Seawater Business
- 35 Aerosol Business
- 55 Acrosof Busiliess
- 36 Other Businesses
- 37 Global Business
- 39 Research and Development

Editorial Policy

In keeping with our mission to help overcome the challenges society faces through our business activities, we have sought to make Air Water Report 2019 an easily understandable source of information. This year's report begins with an overview of the group's growth and its efforts over the years to solve those issues, as seen through the lens of the interaction between our many business activities and the community. Similarly, the business overview and the section on creating social value through business activities now incorporate relevant SDGs as these are now a vital consideration when seeking to create social value. The ESG report states clear key performance indicators, illustrating our dedication to a stronger CSR focus in business management. Also included is a diagram showing the business portfolio and growth strategy forged as part of our All-Weather Management System aimed at ensuring greater robustness.



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

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



ESG Report

- 41 Air Water's Approach to CSR Environment
- 42 Key Performance Indicators
- 43 Air Water Group Basic Environmental Policy/ Material Balance
- 44 Fighting Climate Change
- 45 Effective Use of Water Resources/ Effective Use of Food Waste
- 46 Message from the General Manager of the Compliance Center

Social

- 47 Key Performance Indicators/ Workforce Diversity
- 49 Rewarding Workplace
- 50 Offering Safe and Secure Products and Services/ Enhancing Supply Chain Management to Promote Fair Business Practices
- 51 Pursuing Stable Return of Profits in Line with Performance and Building Trust/ Promoting Activities Closely Tied to and Rooted in Local Communities
- 52 Message Head of Human Resources

Governance

- 53 Enhancing Corporate Governance
- 56 Enforcing Compliance/ Reinforcing Risk Management/ Information Security

Basic Information

- 57 Financial Highlights/ Non-Financial Highlights
- 59 Financial Data (10-Year)
- 61 Financial Information
- 65 Major Group Companies
- 66 Corporate Profile / Stock Information

Timeline of "Value Creation" to Enrich Society

Before Air Water

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, but a common interest in air and water.



Daido Sanso

Kyodo Oxygen

1929 Hokkaido Sanso Co., Ltd. is established. (Company renamed Hoxan Corporation in 1966)

Aiming to save lives and help develop local industries



In the years before the war, a certain individual passed away due to poor transportation conditions and the inability to receive sufficient oxygen inhalation. The deceased's elder brother, the then head of the Chamber of Commerce and Industry of Sapporo City, poured his efforts into founding Hokkaido Sanso Co., Ltd.

1963 Production and sales of Bath-All prefabricated bath units begins.1979 Frozen foods business utilizing liquid nitrogen launched.

1933 Daido Sanso Co., Ltd. is established. Founded in the spirit of a united front and collaboration



At the time, industrial gas was distributed to the military-support industry, and difficult to obtain for smaller businesses. Daido Sanso was established when oxygen-using businesses decided to take matters into their own hands, and band together and produce it themselves.

1933 Operation of 60 m³/h oxygen production machinery begins.
1970 On-site supply for chemical manufacturers begins.
1983 V1 high-purity nitrogen gas generator is developed.
1988 Industrial magnesia business launched.

1962 Kyodo Oxygen Co., Ltd. is established.

Supporting Japan's rapid economic growth with oxygen



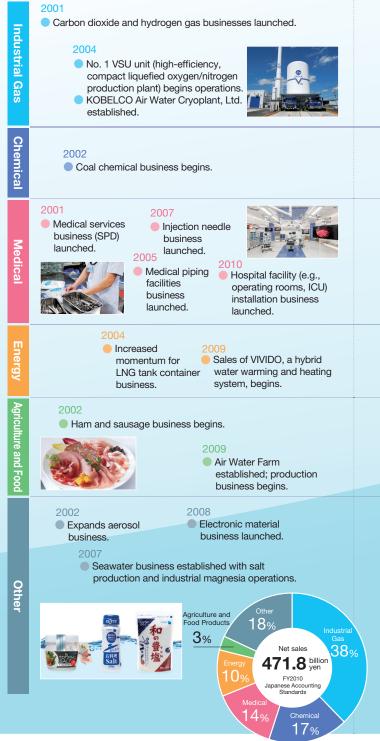
 1962 Supply of gas to Kokura Ironworks begins.
 1978 Production and sales of ELNACKS[®] welding argon begins.

Kyodo Oxygen was established in the midst of the Japanese economic miracle. Sumitomo Metal Industries established Kyodo Oxygen inside its Wakayama Ironworks to meet rapidly increasing steel demand, and the supply of oxygen for converter steelmaking began.



Active Merger-Based Expansion Strategy

Starting in the 2000s, we have expanded our business in scale and scope through a series of mergers and acquisitions, particularly in areas such as industrial gas and medical domains, while ventures in new areas like agriculture and food, and seawater, have built the foundations for our diverse business interests.



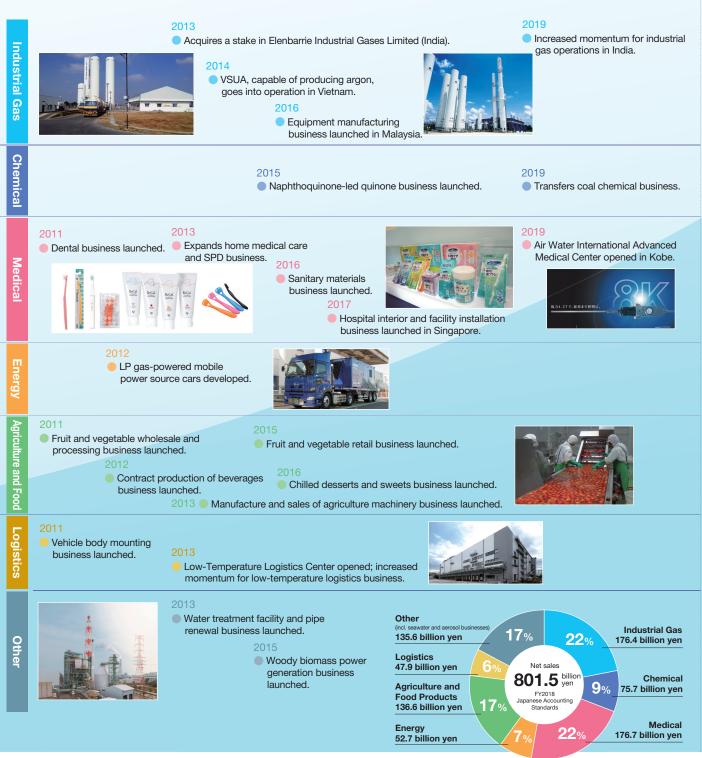
Air Water Inc. was established in 2000 through the consolidation of three companies—Hoxan Corporation, Daido Sanso Co., Ltd., and Kyodo Oxygen Co., Ltd.—each with different histories and cultures, to begin a new mission and purpose: to provide services that innovate industry and society through "air and water."

Since then, the new company has conducted aggressive M&A activities to reinforce its business foundation, expand its business areas, and improve the comprehensive strength of the group.

Air Water will continue taking on businesses that are ahead of their time, in keeping with the spirit of its founder, which has been passed down in an unbroken line.

Reinforcing the All-Weather Management System

Since 2010, our M&A-based expansion into new lifestyle-related business domains like agriculture and food, and "lifestyle medical," has been designed to ensure Air Water continues to grow in a stable manner. The result is our All-Weather Management System, a finely balanced portfolio covering industrial and lifestyle-related businesses.





Contributing to Manufacturing and Supporting Lifestyles

Meeting Society's Needs

"Meeting society's needs with nature's blessings" was newly established as the group's corporate slogan in November 2018. It speaks of our strengths and the social value we provide, such as how our technologies, expertise, and business model combine seamlessly to transform air and water into a stable, sustainable supply of invaluable products, services, and solutions for industries and lifestyles. Indeed, it encapsulates our determination to serve as a valued partner, providing essential resources from the earth in ways that meet the requirements of all people, communities, and industries.

P.21

Industrial Gas Business

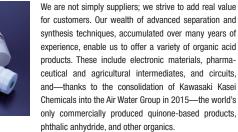


Our ability to harness the qualities of oxygen, nitrogen, argon, and other gases to benefit everything from manufacturing to everyday life supports the very foundation of society. The Air Water Group stably supplies various industrial gases that meet customer needs through its sales bases and nationwide production network extending from Hokkaido to Kyushu.



Chemical Business

P.23



Agriculture and Food Products Business P.29



The Food Products Business, which started with the sales of frozen foods utilizing liquid nitrogen, commenced full-scale participation in the agriculture sector in 2009. Our operations in this area now span three domains relevant to ensuring a secure supply of safe food for consumers. These are: processed agricultural products, which covers everything from plant cultivation to procurement, including products such as ham, deli food, frozen food, and confectionery; beverages, covering fruit, vegetables, and juice; and independent food and farming, covering produce retail and agriculture machinery.

Logistics Business

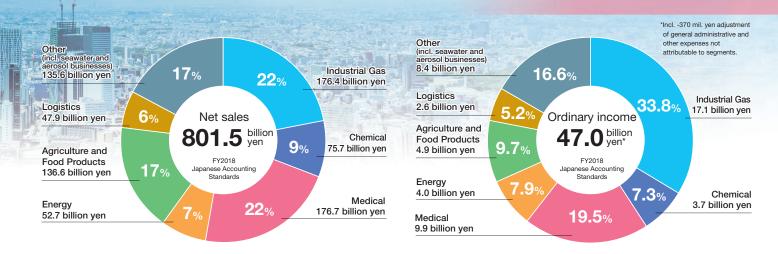
P.31



We operate a comprehensive range of logistics businesses, including container transport between Hokkaido and Honshu, and—taking advantage of the low-temperature transportation technology accumulated in the transportation of high-pressure gases such as oxygen and nitrogen—distribution services with warehouse functions, food logistics for retaining freshness through nuanced temperature control, medical logistics for transporting blood (plasma), and even the manufacturing of vehicles.



with Nature's Blessings



Medical Business

5

P.25

P.33



Besides provision of medical gases, Air Water offers comprehensive medical solutions from advanced medical care to everyday, general medical care. The group has expanded its business domain to include the construction of hospital facilities such as operating rooms, respiratory and other medical equipment, SPD and contract sterilization, and medical, as well as sanitary materials, injection needles, and dental materials.

Seawater Business



Recognizing further potential in industries where air and water combine, we made a capital investment in Tateho Chemical Industries Co., Ltd. in 1988. Since then, we have pursued seawater as a business to effectively harness its resources and create an extensive range of products, including industrial and household salt (in which we have the dominant Japanese market share) as well as high-value-added magnesia products.

Energy Business





The Energy Business began in Hokkaido in 1955 with the goal of enriching people's lives. Today, Air Water operates the LP Gas and Kerosene businesses under the Hello Gas brand, still with the same aspiration. The company is also engaged in various other energy businesses, such as supplying LNG, manufacturing and selling LNG tank containers, and retailing electricity, as a comprehensive energy service provider.

Aerosol Business



Our advanced gas technologies enable us to produce (under contract for clients) a huge variety of aerosols and refill products vital to all facets of industry and life, including paints, auto parts, and industrial components; items for the human body, including cosmetics and quasi-pharmaceuticals; and household items like insecticides.

CEO MESSAGE

Harnessing Our Diverse Workforce's Talents and Wealth of Data to Achieve Enduring Growth.

> Kikuo Toyoda Chairman and CEO

Our unique business model, based on the All-Weather Management System and "Order Rodentia Style of Business," has seen the Air Water Group grow to incorporate more than 260 companies. This solid growth illustrates how being a tool for public good has enabled us to create an ever-diversifying range of social value and thereby make a greater contribution to society's ongoing quest to solve problems.

Leading such a multifaceted group and ensuring we extract maximum potential will require diligent business management and robust corporate governance. We are fully aware of the magnitude of that task, but we are inspired rather than daunted by the challenge of identifying and overcoming management issues to achieve enduring growth.

Ideal Management Structure and Issues to Overcome

My work as CEO of the Air Water Group is founded on two main pillars: getting the best out of our workforce and our wealth of data. The former relates to channeling the great diversity of the group's people and cultures into a cohesive effort; the latter refers to the constant use of data as a basis for debate regarding our businesses. The cement that holds these pillars firm is our belief that data is a common language that all can "speak" to come together in mutual understanding and sharing of goals.

A team effort to refine and strengthen these two pillars is vital if we are to achieve our goals: becoming a "trillion-yen company" and setting the stage for our second era; nurturing the next generation of Air Water executives as part of our quest for enduring growth; and using our business to help society solve problems, a sentiment encapsulated in our corporate slogan, "Meeting society's needs with nature's blessings."

Our Vision: Becoming a "Trillion-yen Company"

Becoming a trillion-yen company was established as our vision back in 2010, and we are on track to make that vision reality in fiscal 2021. Achieving this, however, still requires us to take stock of our growth engines and fine tune them accordingly. As I see it, we have three growth engines: Our strategic and aggressive pursuit of mergers and acquisitions, further increases in the profitability of existing businesses, and technical innovation.



It is essential that future mergers and acquisitions only proceed when we are sure of a balance between investment and restraint in light of our financial health. Specifically, each M&A must be an appropriate part of a detailed grand design for the pertinent business segment, and should have a clear strategic narrative such as strengthening existing business operations or expanding into a new domain. To that end, prior to any decisions, these projects will be subjected to more stringent scrutiny from the Investment Committee and other oversight bodies than ever before.

I believe that, despite the limited growth that mature business domains may yield to markets as a whole, they are still replete with opportunities for companies with refined business models to extract new growth. After all, maturity brings with it morsels that have been overlooked or discarded. Our task, therefore, is to do a thorough stock-take of our existing operations, and dig deep to uncover hidden opportunities to further increase profit-making ability. That is why our focus on data is so important; close study of data is the way to identify untapped potential in mature business areas.

Meanwhile, we intend to drive technical innovation by integrating the many research and development facilities and personnel currently scattered around the group, and strategically pooling their expertise so as to spark radical developments and innovations. Indeed, the sheer variety of core technologies brought to the Air Water Group by our many companies is a source of competitive strength, a point of difference, and a sales advantage. My plan is to make an inventory of each and every such technology and create a groupwide technology platform; I believe that highlighting our technical prowess will surely spark a plethora of open innovation unique to the Air Water Group. Similarly, applying this pan-disciplinary approach to technology to mergers and acquisitions will surely spark new growth.

When these three growth engines run smoothly, we will inevitably achieve our vision of becoming a "trillion-yen company."

Workforce Diversity and Leadership Continuity

The number of companies and employees in the Air Water Group have grown to around three times their volume upon inception in 2000. The many employees and diversity of corporate culture we have gained in that time are the group's foremost strength, and the driving force behind our quest for enduring growth.

I believe that success and growth in business are dependent on people, and that a company's business strategy and its personnel strategy are two sides of the same coin. Thus, the group's personnel strategy, which is aimed at eliciting maximum strength from our broad-ranging workforce, is one of the most pressing aspects of our business, and unleashing the full potential of our female employees is particularly important. The distribution of female employees and managers is uneven across our various businesses, and the group as a whole is failing to tap their potential. If we are to develop our wide ranging businesses, we need to incorporate the views and insights of our talented women, and I am hopeful that doing so will lead to new businesses and services. To that end, we must rapidly make our working environments as welcoming to women as to men, tap female employees for management positions, and develop a pool of women able to strive for executive positions.

Indeed, nurturing the next generation of Air Water executives is also an urgent task. We are currently building an Air Water Group Human Resource Bank, a platform for identifying leadership candidates from among the diverse workforce of our many businesses and developing and applying their executive qualities. Those who score well on the assessment are added to the bank for further development, and in this way, objective data is used to identify, develop, and deploy our human resources optimally.

At the same time, strengthening our human resources worldwide is an urgent problem. As Japan has fewer and fewer young people, globalization is vital to ensuring growth. With that in mind, we have in recent years turned our attention overseas, for instance by gaining a foothold in the Indian industrial gas

CEO MESSAGE

market and laying the foundations for related engineering and equipment businesses in North America and Asia.

If we are to expand swiftly and surely, we need as many talented people as possible, particularly those who can build trust with our global partners, communicate effectively, and negotiate tenaciously in a global setting.

To tackle these challenges, our overseas and career-track hiring programs are geared toward swiftly acquiring and developing a globally capable workforce to propel the group forward.

Unique Strengths Applied to Solve Problems

"Meeting society's needs with nature's blessings" was established as the Air Water Group corporate slogan in 2018, an encapsulation of our determination to create value for society.

The origins of the Air Water Group's business can be found in its name, which consists of two words: "air" and "water." It is the bedrock that underpins our promise to all stakeholders: We will effectively harness the earth's resources to create genuinely beneficial products, services, and solutions; and in doing so, will support industries and lifestyles, and respond to society's needs.

That promise reflects the proximity of our business activities to the Sustainable Development Goals set by the United Nations General Assembly and a task shared by all humankind. At the heart of the SDGs is a desire to balance business activities with the need to resolve social problems, and as a conglomerate of many functions, it is up to the likes of the Air Water Group to maximize the potential of our various businesses to help the world defeat those problems. As things stand, we are able to contribute mainly in four areas—security, safety and disaster prevention; healthcare; clean energy; and water and the environment—and helping to overcome problems in these areas is now the core focus of our activities.

Complementing our contribution to solutions to environmental challenges through our environmental businesses are our accelerated efforts to reducing the environmental impact of our own operations. For instance, striving to cut carbon dioxide and other greenhouse gas emissions is a priority for a group like ours, which is involved in industrial gas and uses vast volumes of electricity. To that end, our mid-term management plan, "NEXT-2020 Final," outlines response to climate change as one of our key challenges and establishes greenhouse gas (CO₂)



emission reduction targets: six percent below fiscal 2013 levels by fiscal 2021, and 15 percent below by fiscal 2030. Also, we are adopting carbon-neutral woody biomass power generation, where renewable resources like forest thinnings are used to generate power, thereby further helping cut our greenhouse gas emissions.

Moving forward, conserving energy and adopting renewable energy remain core platforms of our mid-to-long-term planning. Guided by the SDGs and inspired by our Management Philosophy of creating businesses linking to the earth, we at the Air Water Group look forward to applying our unique strengths and achieving breakthroughs that reward the trust and expectation invested in us by the global community.

kikuo Toyoda

Kikuo Toyoda Chairman and CEO

COO MESSAGE

The Courage to Seek New Frontiers, and the Ability to Innovate and Reform.

NEXT-2020 Final: New Mid-Term Management Plan Paves the Way for a Trillion Yen in Sales

Between fiscal 2016 and fiscal 2018, we implemented "NEXT-2020 Ver. 3," stage three of our plan to achieve the long-term vision we established in fiscal 2010: becoming a "trillion-yen company" by fiscal 2020. That period saw solid performance growth in all segments, which drove stable improvements in consolidated sales and income, and resulted in record figures in consecutive years. Moreover, those three years of growth pushed sales in medical segments to levels rivalling those of industrial gas, while sales and profits in our agriculture and food products business also grew dramatically, establishing it alongside industrial gas and medical as one of the three pillars underpinning our operations.

Starting in fiscal 2019, we have a new mid-term management plan covering the next three years: NEXT-2020 Final. The new plan focuses on becoming a trillion-yen company and on innovation as exercises for the Air Water Group to build up the strength to sustain growth long after the plan period comes to an end.

In that sense, the vision of becoming a trillion-yen company is not a goal but a milestone on a longer journey. We need to embrace change rather than fearing it, because innovating will allow us to lay robust foundations to bear the weight of our quest for enduring growth, and become a strong company in both name and substance. With that in mind, we have identified six key areas of reform.

- 1. Portfolio reform
- 2. Structural reform
- 3. Local business policy reform
- 4. Head office admin division reform
- 5. Workforce development reform
- 6. Social value creation reform

These reforms are complemented by three management policies as a means of achieving the plan's targets as well as sustainable growth: mergers and acquisitions, restructuring group companies, and enhancing our product development capabilities.

By the end of the plan in fiscal 2021, we plan to have reached a trillion yen in revenue, 60 billion yen in operating profit, and 37 billion yen in net income. This represents an annual increase of at least nine percent in all these figures. It is a major undertaking, but achieving these targets will ensure the realization of our vision of becoming a trillion-yen company and propel us to the ideal position for our second era.

Success will require aggressive investment, and we will do so, and we plan to inject 170 billion yen of capital investment over three years. Of this, 40 billion yen will go to maintaining and upgrading existing facilities, and around 130 billion yen will be dedicated to new facilities and extensions. Another 70 billion yen will be spent on mergers and acquisitions over three years, making a total investment of 240 billion yen over the duration of NEXT-2020 Final.

For now, though, our focus for fiscal 2019 is on three areas: improving profitability, generating more momentum for our global expansion, and creating unique local businesses.

Kiyoshi Shirai President and COO

COO MESSAGE

Stronger Engineering and Marketing Across the Whole Air Water Group

Improving profitability is one of our most pressing tasks. Doing so will of course require strict cost cutting and elimination of waste, but it is also vital that we improve the value we provide to customers. Offering unique products, services, and solutions that exceed clients' expectations will establish us as a strong business that does not simply compete on price. To achieve that, we need to bolster our technical capabilities.

A wide-angle view of the group's many businesses highlights one area requiring urgent technical improvement: engineering, where there is considerable room to create new products by improving, customizing, or upscaling existing products. Tackling our engineering strengths and fully nurturing the many "seeds" we have on hand is vital to improve the profitability of our manufacturing operations. To this end, we have established engineering departments in all Air Water Group companies.

Those technical improvements must also be accompanied by innovations in sales and marketing. The first step is to coordinate marketing information held by each company, such as product demand and market share, and subject it to comprehensive analysis. To do this, we have established strategic marketing departments in each company which, in future, will have an expanded role, including using data analyses to formulate sales strategies, identify targets, set product prices, and provide detailed instructions to sales departments. Once in full stride, the strategic marketing departments serve to embed in our DNA the importance of an ongoing cycle of thorough data analysis and improvements based on analysis outcomes, resulting in more efficient sales practices and, eventually, major improvements to profitability.



Ideally, the Air Water Group will be able to continually generate and offer new solutions as each constituent company utilizes and evolves its unique products and technologies, adopting new ideas from outside. The aforementioned dedicated departments in the companies, which are essential to this process, have already been established, and I intend that this will yield positive outcomes and improvements to overall profitability.

Global Expansion Underpins a New Generation of Growth

The future of the Air Water Group clearly depends on expanding overseas and becoming a genuinely global organization. To achieve this, we have restructured our global business departments, and are focusing our organizational strengths on swift, accurate collation and analysis of information to ensure we are ahead of the game and able to offer timely outcomes. Making use of this new framework, we will seek to enhance our global capabilities, including our risk management and governance. With outstanding "offence" and "defense," we look forward to pursuing greater business success worldwide.

One of our first projects under this new setup is the expansion

	NEXT-2020 Ver. 3	NEXT-2020 Final			3-Year
	FY2018	FY2019	FY2020	FY2021	Growth Rate
Revenue	742.3	830	900	1,000	134.7%
Operating profit	42.8	48	53	60	140.2%
Net income	28.8	30	33	37	128.4%
(billion ven)					

NEXT-2020 Final Business and Management Performance Indicators (as per IFRS)

	FY2018	FY2021
ROE	10.6%	10.8%
ROA	5.7%	6.2%
% of total global revenue	5.0%	10.0%

NEXT-2020 Final Concept and Basic Policies

Innovation

The 6 Areas of Reform

How?



All-Weather Management System & Order Rodentia Style of Business

of our industrial gas operations in the eagerly watched Indian market. Specifically, when global gas giants Linde and Praxair merged in July 2019, we acquired the business in eastern India they were looking to unload and, also in 2019, we are due to acquire their operations in south India by the same method. We hope that this will be the foothold we need to expand our industrial gas interests in India; our goal is that India will contribute around 20 percent toward the 100-billion-yen global sales target set forth in NEXT-2020 Final.

The other driver of our future global expansion is the global engineering business. Merging with Singaporean power protection solutions provider Power Partners in fiscal 2018 and Dutch uninterrupted power supply (UPS) maker Hitec Holding in July 2019 has given us a new core offering: high-output UPS systems. Meanwhile in the North American market, forging partnerships with local dealers to offer local VSU solutions is the next milestone on our quest to, among many other things, establish an industrial gas engineering and equipment business.

North America and Asia will continue to be the dual focal points of our M&A-led efforts to build a foundation for our global engineering business, and thereby lead our global operations.

Growth and Prosperity Together with Local Communities

The Air Water Group's long involvement in the industrial gas business has given us the foundation on which to build eight companies throughout Japan that are structured around the regions they serve rather than any particular product or service. We call these "regional business companies." Coincidentally, our business interests, which have become increasingly diverse through mergers and acquisitions, can be broadly divided into eight domains.

Our community-centric strategy is geared toward using our vast platform to configure our many technologies, products, and services for those eight regional business companies so as to generate new products and business models that help resolve local challenges and contribute to local development. The regional business companies are required to know their local communities inside out and use that knowledge to identify local issues. As members of the Air Water Group, they then have access to countless products and services that can be put to use resolving those issues, and in turn create new business opportunities.

That kind of business creation is only possible if the eight regional business companies continue to raise their presence in their communities. To that end, they must take every opportunity to make a contribution and to deepen ties with local governments and businesses. Similarly, we mustn't forget the value of M&As and partnerships in forging unique local business models.

These efforts bring great value: they serve to protect and nurture local businesses and help people build a brighter future. Moreover, such region-centric strategies that value local qualities are one of the Air Water Group's defining features, and we look forward to seeking enduring growth together with our local communities.

Kiyoshi Shivai

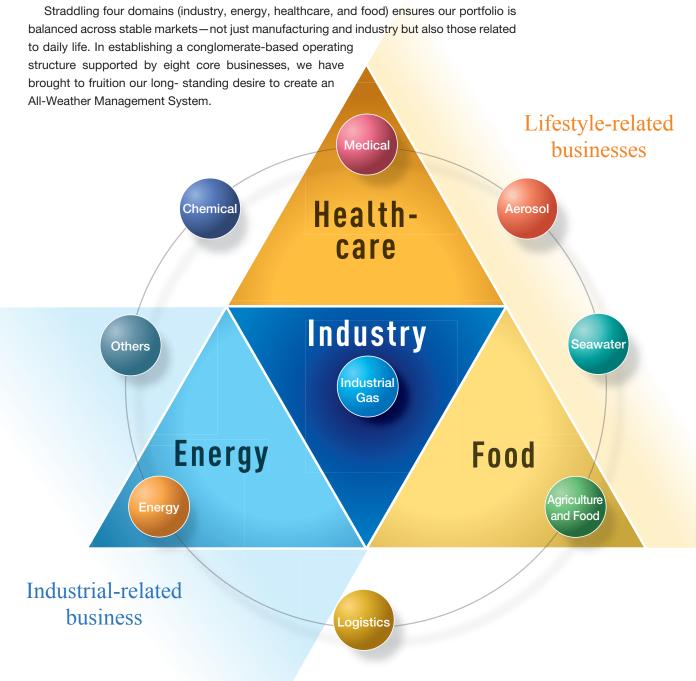
Kiyoshi Shirai President and COO

Aiming to Be a Company with Enduring Growth Air Water's Business Foundation and Growth Strategy

Business Foundation

A Broad Portfolio Across Four Domains to Generate Stable Growth

Continuity and development are the overriding obligations of every company. One of the ways we have striven to ensure the continuity and development of the Air Water Group is our All-Weather Management System, which provides stability in all conditions. Thus, in an age when many companies are streamlining and concentrating their operations, we seek diversity by acquiring a variety of businesses to complement our core Industrial Gas Business. Today, our portfolio goes far beyond industrial-related business such as gas and energy to include lifestyle-related businesses like medical, agriculture and food, and seawater. The result is the resilience to withstand the impact of business climate fluctuations.



Growth Strategy

M&A and Technology Strategy Driving Balanced Local and Global Growth

The Air Water Group's more than 260 companies contain many SMEs that seek growth through independent management. On the other hand, organic grouping of these units helps us sustain overall growth as a collective. We call this independent-but-grouped approach the Order Rodentia Style of Business, and have adopted it as a central part of our management. Under this unique system, the group's growth is pulled along by two strategies: our technology strategy and our M&A strategy.

The technology strategy integrates our huge range of technological resources spread across many business domains into a common platform, thereby enabling the creation of new growth drivers. Meanwhile, the M&A strategy provides for the sharing of the Air Water Group's management philosophy and code of conduct among companies that join the group while respecting their independence. We seek to maximize synergies through appropriate combination of the workforces and technical resources they bring to the mix. By blending these strategies with our community-focused regional businesses and expanding global businesses, we are determined to explore new growth.

A Company with Enduring Growth

Global Strategy Led by industrial

gas operations

Eight growth-driver business domains

Regional Strategy

Uncovering new markets linked to local needs

Technology Strategy

Building a groupwide platform to integrate our R&D, engineering strengths, and many technological resources promotes in-house open innovation, which we believe will spark new technologies and boost our product development capabilities.

M&A Strategy Mergers and acquisitions are more than a way to add others' technologies, expertise, and clientele to our portfolio; they are ideal vehicles to parlay those into new synergies and new values through combination with our existing resources.

Rooted in and Growing with Local Communities **Regional Strategy**

Our regional business companies operating in eight regions around Japan arrange and deliver a wide variety of technologies, products, and services of the Air Water Group in response to the needs of markets and customers. Their activities include not only selling the group's products and services, but also unearthing regional issues and creating new products and business models that contribute to regional development, in cooperation with Air Water and its group companies. They are also proactively committed to the creation of businesses to support people's lifestyles and local industries taking advantage of regional characteristics.

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Hokkaido Air Water

Capital: 300 million yen Sales: 64.4 billion yen Employees: 1,078

NEXT-2020 Final Targets

	(Unit: Billion yen)	
	2018	2021
Revenue	173.6	217.7
Operating profit	13.7	17.7
Operating margin	7.9%	8.1%

*Total of all 8 companies



Kinki Air Water

Capital: 350 million yen Sales: 27.1 billion yen. Employees: 280

Koshinetsu Air Water

Capital: 20 million yen Sales: 6.7 billion yen Employees: 222

Tohoku Air Water

Capital: 100 million yen Sales: 11.8 billion yen Employees: 241

Air Water

Chubu Air Water Capital: 350 million yen Sales: 12.8 billion yen

Employees: 104

Kanto Air Water

Capital: 350 million yen Sales: 26.7 billion yen Employees: 321



Air Water Capital: 350 million yen Sales: 13.4 billion yen Employees: 167

Kyushu

Chushikoku

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Capital: 100 million yen Sales: 10.8 billion yen Employees: 160

Sales: Fiscal vear ended March. 2019 Employees: As of March 31, 2019; including contract employees, etc.

M&A Strategies in Regional Business Companies

Air Water has expanded its business scale and created synergies under the M&A strategies. In recent years, as the regional business companies have been achieving steady growth under the regional strategies, they have begun to take the initiative in conducting M&As. M&As are an important business approach not only for Air Water but also for the regional business companies. Air Water and regional business companies are both continuing to grow under the same strategies.

Contribution to Society by Regional Businesses **Closely Linked to Regional Communities**

M&A strategies and regional strategies are inseparable growth strategies of Air Water, and the close ties with local communities inarguably form the core of regional businesses. Air Water believes that the reason for having regional business companies is because they are able to think for themselves about growth in local communities from a regional perspective. Aiming to become companies that are rooted in local communities and that match the local characteristics; growing businesses that are rooted in local communities-in the course of achieving these goals, regional business companies communicate know-how on M&A to local communities and support local companies suffering from a lack of successors. Each regional business company will continue growing along with the people of its local community, being firmly rooted in the region and having a vision for an enriched future.

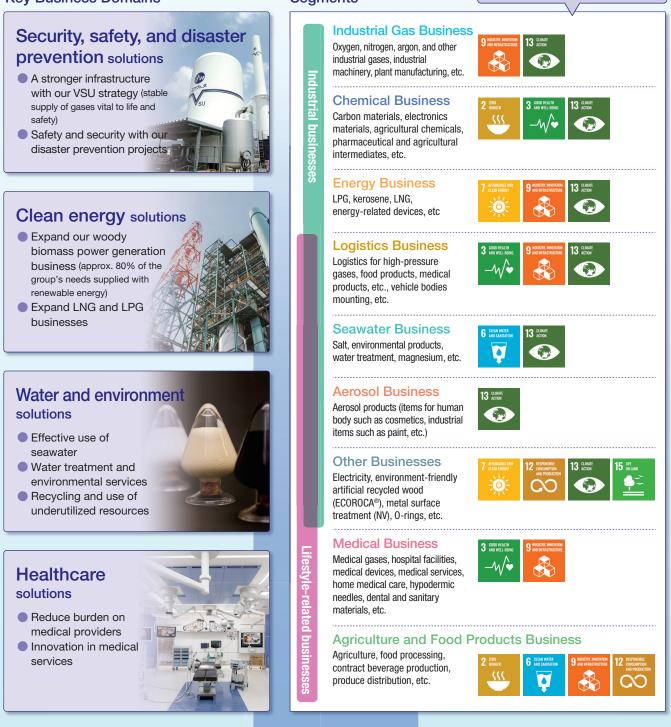
Creating Social Value through Business Activities As a company engaged in businesses related to air, water, and the earth

We will harness the earth's resources sustainably to create genuinely beneficial products, services, and solutions; and in doing so, will support industries and lifestyles, and respond to society's needs.

Relevant SDGs

Key Business Domains

Segments



We contribute to resolving social issues by dedicating ourselves and our resources to the creation and development of businesses linking air, water, and the earth.

Feature _

Using Renewable Energy to Generate Electricity

We use our proprietary high-efficiency, compact liquefied oxygen/nitrogen production plants (VSUs) to produce industrial gas close to areas of demand. This system ensures stability of supply while the shorter delivery distances result in relatively smaller greenhouse gas emissions. Moving forward, we will continue to pursue our woody biomass power generation business with a view to cutting greenhouse gas emissions from the consumption side of the energy equation, as well. Securing a base power supply allowing for a degree of self-sufficiency is vital for ensuring business continuity in all circumstances, including post disaster situations. When running at full capacity, the four power plants shown to the right generate power equivalent to approximately 80 percent of consumption by the whole Air Water Group.

Our Renewable Energy-Based Electricity Generation Business

Air Water & Energia Power Yamaguchi

Joint venture with Chugoku Electric Power based in the Air Water Hofu Plant. Woody biomass and coal co-fired power plant. Began operating in July 2019. Generation capacity: approximately 112,000 kW.

Air Water & Energia Power Onahama

Joint venture with Chugoku Electric Power based at the Nihonkaisui Onahama Plant. Japan's largest woody biomass mono-fired plant under construction; operations scheduled to start in April 2021. Generation capacity: approximately 75,000 kW.

Nihonkaisui Ako Plant (2 power plants)

Nihonkaisui has long had its own generation capacity for its salt production business. No. 1 woody biomass plant began operations in 2015, entering power generation business in earnest; no. 2 woody biomass plant scheduled to begin operations in September 2020. Generation capacity: approximately 46,500 kW (both plants).

Nihonkaisui TTS Kanda Power

Incorporated to bolster Nihonkaisui's power generation business, this woody biomass power plant is situated in Kanda-machi, Fukuoka, separately from the salt factory. Operations scheduled to start in October 2023. Generation capacity: approximately 50,000 kW.



Air Water & Energia Power Yamaguchi



Nihonkaisui Ako Plant

Trusted Local Power Plants Generating a Stable Supply of Clean, Low-Cost Energy

Woody biomass and coal co-fired power generation at Air Water & Energia Power Yamaguchi

Air Water & Energia Power Yamaguchi, a joint-capital venture with Chugoku Electric Power, runs the Hofu Woody Biomass and Coal Co-Fired Power Plant built on unused land at our Hofu Plant. The facility began commercial operation in July 2019, and sells the power it makes taking advantage of feed-in tariffs. Here, we make a genuine effort to help manage local forests, promote the use of renewable energy, and reduce carbon dioxide emissions by using carbon-neutral woody biomass in addition to some coal, which still offers lower costs and better supply stability.

Fuel



Palm kernel shells Annual use: Approx. 240,000 tons

DAWEP

Wood sourced



Coal

within Yamaguchi Annual use: Approx. <u>40,000 tons</u>

Annual use: Approx. 180,000 to



The industrial gas plant adjacent to the power plant



More than 10,000 tons of palm kernel shells stored in the stock yard

F A 900

Among Japan's Top Biomass Power Producers

Considering the scale of power generation we seek and the costs of producing electricity, we decided on a balanced mix of woody biomass (which contributes to lower greenhouse gas emissions) and coal. This is made possible by our circulating fluidized bed boiler, which takes air in at the bottom and circulates fuel uniformly through a bed made up of a heat medium (in this case, hot sand) during combustion. The process is ideal for burning roughly cut fuel, and allows for a higher ratio of woody biomass in the fuel mix. This setup also allows for direct in-furnace desulfurization by injecting limestone, and non-catalytic denitration of waste gas by circulating urea. The equipment is therefore compact, as are the costs.

This plant burns approximately 280,000 tons of woody biomass a year (240,000 tons of palm kernel shells and 40,000 tons of thinnings from local Yamaguchi forests) and approximately 180,000 tons of coal. Much effort has gone into establishing transport and loading systems capable of handling such huge quantities of fuel, so as to ensure a stable and efficient supply.

The result is a plant with a generation capacity of approximately 112,000 kW (generator output), and annual generation has now reached around 800 million kWh, equivalent to the entire annual household and industrial consumption of Hofu City. This places this facility among the top echelon of currently operating woody biomass power stations in Japan.

Eco-Considerate Power Plant Uses Plentiful Local Resources

By generating power using carbon neutral woody biomass fuel instead of burning fossil fuels, we contribute to the reduction of greenhouse gas emissions. The Hofu Woody Biomass and Coal Co-Fired Power Plant has a comparatively high ratio of woody biomass to coal—around 50 percent—which slashes the amount of carbon dioxide emitted per unit of electricity generated. Moreover, the plant's low-temperature combustion (between 800 and 900 degrees Celsius) keeps nitrogen oxide emissions lower than high-temperature combustion systems. Other initiatives to protect the environment include using heat-exchanging cooling towers to recycle and reuse industrial water instead of discharging huge volumes of hot wastewater into the surrounding area.

Some of the woody biomass we use comes from underutilized materials such as forest thinnings sourced locally in Yamaguchi Prefecture. Finding uses for forest thinnings is a perennial headache for forestry businesses, and the potential for woody biomass power facilities like ours to offer a long-term solution for this underutilized resource could benefit the local economy. In addition to woody biomass, we use locally sourced resources wherever possible. For instance, we get our water from the plentiful Saba River, a first-grade waterway that flows through Hofu City and provides us with approximately 9,400 cubic meters of water per day (equivalent to twenty-six 25-meter swimming pools), and the limestone used for desulfurization in our boilers is mined locally in Yamaguchi Prefecture, too.



A circulating fluidized bed boiler



A steam turbine power generator



The central control room operates 24-hours a day



Bag filters remove hazardous substances from the boiler's combustion gases



Cooling towers use water from the Saba River

Aiming to Be a Familiar Part of the Community



Perhaps strangely for a power station generating more than 100,000 kW, the Hofu Woody Biomass and Coal Co-Fired Power Plant is quite close to the city center. But that proximity makes it easier for us to host tours and show people the impressive scale of our facilities and tell them about our environmental efforts. Local residents naturally want to know more about their city, so they are curious about the power plant that has quickly become a Hofu landmark. We are, of course, happy to show off our plant, and we strive to run the plant in a way that can forge ties of trust with our community.

Shinji Yokota

Director of Air Water & Energia Power Yamaguchi and foreman of the Hofu Woody Biomass and Coal Co-Fired Power Plant (as of July 2019)

> Imported palm kernel shells and coal are transported to Mitajiri Port on the *Ishin*, a specially built vessel designed to carry cargo from the major ports of Kyushu and the Chugoku region. From Mitajiri Port, the cargo travels the 450 meters directly to the power plant on a closed conveyor belt.

Feature *L* Using the Gifts of the Sea for Everyone's Benefit

Our seawater business began as a means of diversifying our portfolio. Today, we are proud to carry on the long tradition of salt production while creating a variety of new derivative products to meet society's needs. In recent years, the seawater business has garnered attention for its potential applications in a variety of domains, including environmental protection, and seawater is fast becoming a major factor in the group's latest movements.

Striving to Unlock the Boundless Potential of Seawater and Build a Better Future

These days, our seawater business is pushing back boundaries and making new discoveries in the quest for seawater applications. It all began with salt production, the process of which requires various items and generates a variety of byproducts, not to mention the many things other than salt which can be derived from seawater. Our mission has been to identify the many business seeds offered by seawater relevant to different industries-including medical, electricity, environmental protection, chemicals, and food-and to nurture them into viable, segment-straddling business ventures. The seawater-based industries we develop have the potential to grow and support social infrastructures; desalination techniques and technologies, for instance, may help alleviate the global shortage of drinking water. Today, as ever, we work hard on doing what needs to be done to unlock seawater's world-changing potential.



In April 2019, the Air Water Group established a new seawater company, which brought the Nihonkaisui Group, Japan's foremost salt producer, and the Tateho Chemical Industries Group, a manufacturer of industrial magnesia, into the fold. Our aim is to combine the various R&D, production technologies, markets, and other resources that each party brings to the company to spark innovation and push back the frontiers of the seawater industry.

The seawater company is already involved in projects with potential to be highly valuable for society. Among these activities, expectations are particularly high for the company's environmental business.

Leveraging Advanced Salt Protection **Technologies to Help Protect the Environment**

Our seawater business is headed by the Nihonkaisui Group, a collective of Japan's leading salt producers. Now, we are applying the advanced techniques and technologies built up over long years of experience in salt production to contribute to society through our environmental business.

One example is our magnesium hydroxide business, in which we utilize the residual magnesium in seawater after salt extraction. This is used for desulfurization of flue gas and other applications. Another example is "READ," our range of rare earth adsorbents, which developed from our existing technologies to remove boron from seawater. READ is used as an adsorbent to remove arsenic. fluoride, boron, and other heavy metals. For instance, it is used in devices to remove arsenic from drinking water in places like India, Bangladesh, and Europe, where arsenic contamination is a serious issue. Moving forward, we are looking to expand these water treatment successes into broader applications in the public infrastructure sphere, such as the rehabilitation of sewer pipes, so as to make an even greater contribution to society.

The relevant markets are evolving: stricter environmental regulations in Southeast Asia and other regions has boosted demand for READ

adsorbents, and there is considerable expansion in wastewater treatment and infrastructure projects. We are determined to grow our environmental management business by developing more new products and establishing bases in Southeast Asia as a launchpad for greater things.



Teaching people how to use READ in Bangladesh





An arsenic removal device using **RFAD** adsorbent

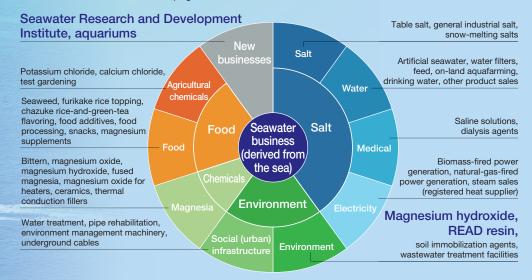
READ-As, an arsenic removal adsorbent

Aquarium business: designed to add to the

Our aquarium business began with an investment in an aquarium scheduled to open in Shikoku in April 2020 in the hope of boosting sales of Sealife, our artificial seawater, and expanding our environmental management business. We are now involved in plans to open other aquariums, and are ideally positioned to offer the necessary technologies, equipment, and materials. Combining the group's many strengths to open and maintain a state-of-the-art aquarium will serve to broaden our operations and promote synergies among group companies.

Expansion of the Air Water Group's Seawater Business

See "Seawater Business" on page 33 for details.



Research and Development to Create New Value and Businesses

Further broadening of the seawater industry's horizons requires a solid R&D framework to improve our technological prowess, and development aimed at putting those technologies to gainful use. To that end, we are scheduled to launch our seawater R&D project in 2020, with a view to opening the Seawater Research and Development Institute in the spring of 2022.

The institute will be located on the Hibikinada Sea coast of Kitakyushu, a well-appointed site near the Hibikinada Plant of Tateho Chemical Industries, the group's unrivalled manufacturer of magnesia for electromagnetic steel sheets, and overlooking the beautiful sea alongside some of the biggest names in the Japanese corporate community.

Here, we will pursue R&D aimed at combining seawater technologies and creating new and unique technologies; unconstrained by pre-existing concepts, our team will look to harness the powers of the sea, water, land, and air to create new, high-value-added products and services.



The site of the Seawater Research and Development Institute (in the same areas as Tateho Chemical Industries' Hibikinada Plant)

The Concept Behind the Seawater Research and Development Institute



Combine to create new, high-value-added products and services

Bring fresh ideas to the industry and create new value

group's business domains and generate synergies among group companies



Sealife, the standard in artificial seawater Artist's rendition of the Shikoku aquarium

Industrial Gas ^{Business}



Business Facts

- Ongoing strong demand for gas from the Japanese manufacturing industry
- \bigcirc Electricity and logistics costs are increasing
- \diamondsuit Maintaining a stable supply of helium and carbon dioxide is a challenge
- Increased need for automation and labor-saving measures at client factories
- Increasingly frequent natural disasters are driving need for business continuity plans

Core Strategy

- Grow share of the Japanese gas market through aggressive capital investment and stronger ties with regional partners
- Foster second and third core businesses through new product/service development and global expansion

Major Measures

- Deeper mining of Japanese industrial gas market potential
- Open eight new VSUs by FY2021 for a total of 24 nationwide
 Keep abreast of changes in demand from steel and electronics industry clients
- Stay on top of rising costs and revise prices as necessary

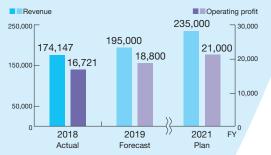
2 Expand device and equipment business

- Use mergers and acquisitions to expand operations relating to devices for electronics industry clients
- Undertake structural enhancements to expand air separation unit business
- Configure Japanese business sites to establish cost-competitive engineering framework
- Develop a system integration business able to meet clients' demand for automation and labor-saving

3 Expand global operations

- Expand industrial gas business in India and Southeast Asia
- Expand procurement and sales of gas applications, special materials and special chemicals



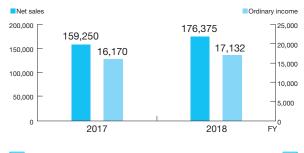


Review of FY2018

On-site gas supply for steelmaker clients progressed well in fiscal 2018 thanks to efforts to stabilize operations and improve efficiency. Supply by tank trucks and cylinders was solid overall, sustained by a number of factors, including: deployment of high-efficiency, compact liquefied oxygen/nitrogen production plants (VSUs), as illustrated by the start of operations at the lwate Plant; stronger ties with major local partners; and firm demand from Japanese manufacturers in the automotive, chemical, and construction industries among others. As a result, industrial gas sales showed robust growth overall, but profit margins were impacted by rising electricity and logistics costs, as well as natural disasters.

Equipment and construction sales grew on the back of orders for gas generators and low-temperature equipment, while the consolidation of Japan Pionics, which we acquired in fiscal 2017, and global subsidiaries into group accounts also contributed.

Net Sales & Ordinary Income (unit: million yen)



Outlook for FY2019

In Japan, we forecast solid demand for gas despite stagnant production in some regions and industries. However, increasingly frequent natural disasters mean business continuity planning is more important than ever before. Mindful of this, we will work to expand our VSUs and other manufacturing sites, as well as cylinder filling stations, thereby ensuring a stable supply network and growing our share of the industrial gas market. Indeed, we have already begun, with VSUs opening in Fukuyama City, Hiroshima, in April 2019, and in Sakaide City, Kagawa, the following month.

Outside of Japan, the foothold we gained in the Indian market (a market for which high growth is predicted) with the consolidation of Elenbarrie Industrial Gases into the group in fiscal 2018 was reinforced by the acquisition of operations in the eastern and southern parts of the country jettisoned as part of a merger of major gas companies. Moving forward, we will strive to capture the demand for industrial gas in India.

Business Overview and Features

The Industrial Gas Business delivers a stable supply of industrial gases, such as oxygen, nitrogen, argon, and carbon dioxide, by the optimum supply method, ranging from supply using cylinders or tank trucks to on-site supply. The Industrial Gas Business also offers gas applications, as well as engineering and industrial equipment, by making effective use of technologies developed in-house.

Relevant SDGs

transportation

- Stable supply of industrial gases
- Reduction of environmental load by improving plant efficiency

Reduction of CO₂ emissions associated with



Types of Gas			
Oxygen	Nitrogen	Welding gas - ELNACKS® - DIE ARGON - AW SHIELD - HOKUSEAL	
Argon	Carbon dioxide		
Hydrogen	Helium		
Rare gas	Cutting gas	Others	
– Xenon – Krypton – Neon	- DIETHYLENE - DIE CUT® - DIE LASER Acetylene	 Specialty chemicals Ethylene oxide Semiconductor specialty gas Stable isotopic gases, etc. 	

Industrial Gas



On-site Supply

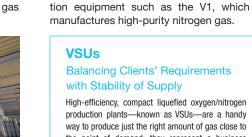
Air Water installs gas generation equipment on the premises of steelworks, chemical plants, and other facilities that require a large volume of high-purity oxygen or nitrogen and provides gas supply through pipelines.



Cylinder Supply

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

Equipment and Construction



Mini On-site Supply

Air Water ensure stability of supply to

industries with medium-scale demand

such as the electronics industry by install-

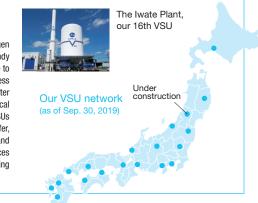
ing small- to medium-scale gas genera-

way to produce just the right antoint of gas close to the point of demand; they represent a business model with benefits including much shorter transportation distances as we team up with local partners to satisfy local demand. Our 18 VSUs nationwide help make our supply network safer, more stable, and more resilient in disaster and emergency situations, and the shorter distances mean less carbon dioxide emitted during transportation.



Supply by Tank Trucks

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





Industrial Equipment

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



Gas Applications

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



Engineering

Air Water offers integrated solutions based on the process engineering of cryogenic air separation systems, from design and fabrication to safety management.

Chemical Business



Business Facts

- Advancing technologies (e.g., medical and agricultural chemicals, electronic components) mean the functional chemical domain is becoming broader and more sophisticated
- \bigcirc Environmental regulations in China are a risk

Core Strategy

Merge and acquire to expand our functional chemical businesses; utilize the stronger earning power gained from enhancing Kawasaki Kasei Chemicals' quinonebased product line-up to restructure the business and improve operating income.

Major Measures

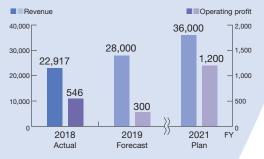
Mergers and acquisitions

- Target the top fine chemical companies in niche markets
- 2 Strive for ever better performance of quinone-based products (i.e., by Kawasaki Kasei Chemicals)
- Make capital investments for a stable, high-efficiency production framework
- Integrate the group's R&D functions to improve product and market development capabilities

3 Restructure the independent business foundation

- Strive for intra-group synergies so as to expand into high-value-added segments where we are cost-competitive
- Harness the group's broad range of business fields to mine strengths, including client base, technologies, workforce, and other resources

Revenue & Operating Profit (IFRS) (unit: million yen)



Review of FY2018

While stricter environmental regulations caused some production flutters in our Chinese production plants, weeding out of unprofitable products, expanded sales and price revisions of products mainly for the electronic materials market, led to a major improvement in fine chemical revenues.

At Kawasaki Kasei Chemicals, China's environmental regulations caused some production fluctuations at clients' factories, resulting in a drop in sales of naphthoquinone, but a rise in the ingredient costs related to organic acid products led to a price rise, which nudged net sales upwards. Meanwhile, fixed cost cuts and procurement streamlining helped lower manufacturing costs, which ensured profits were solid this year.

The coal chemical business also progressed well, buoyed by an increase in the unit price of coke oven gas refinement and increased sales (by quantity) of crude benzene, a basic chemical.

Net Sales & Ordinary Income (unit: million yen)



The outlook for the chemical industry remains tough, particularly with the ongoing impact of stronger Chinese environmental regulations. Amid these circumstances, we completed the transfer of our coal chemical business to the Nippon Steel Group on April 1, 2019.

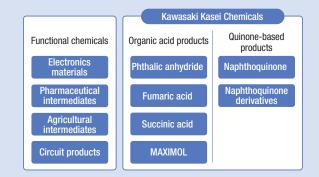
Moving forward, we are eager to expand the horizons of our Chemical Business, for instance through functional chemicals. Here, we will combine fine chemicals, which are focused chiefly on electronic materials, with carbon material products, including the thermally expandable graphite that we retained when offloading the coal chemical business. Similarly, we will work with Kawasaki Kasei Chemicals and its line-up of general-purpose chemicals like phthalic anhydride and quinone-based products like naphthoquinone to extend our existing range of products, while expanding further into the functional chemical domain through mergers and acquisitions.

Business Overview and Features

From electronic materials to medical and agricultural intermediates, through quinone-based chemicals (that only Kawasaki Kasei Chemicals has succeeded in producing at commercial scale), and other organic acid products like phthalic anhydride, as well as high-value-added chemical products like Maximol, which is used for rigid polyurethane foam, we develop, produce, and offer a stable supply of a truly diverse range of products.

Relevant SDGs

- Development and production of phormacouting and agricultural into
- pharmaceutical and agricultural intermediates
 Reduction of greenhouse gases through provision of products (Kawasaki Kasai
- provision of products (Kawasaki Kasei Chemicals, MAXIMOL, SAQ® pulp digesting agent)



Functional Chemicals



Electronic Materials

We leverage liquid air oxidation, nitration, and other synthesizing technologies to manufacture and sell a variety of products to satisfy customers' needs, such as the semiconductor sealant SK Resin.

Kawasaki Kasei Chemicals



Pharmaceutical and Agricultural Intermediates

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



Circuit Products Printec designs high-density circuits and manufactures and sells high-density mounting boards such as servo motor control boards.



Organic Acid Products Here we manufacture and sell the phthalic anhydride used in vinyl chloride plasticizers and the succinic acid and fumaric acid used in food additives.



Organic Acid Products Derivatives We manufacture and sell organic acid products derivatives, including MAXIMOL, which is used in the urethane base for products like heat insulation.

~eatura



Quinone-Based Products

As the only company in the world to successfully produce quinone-based products such as naphthoquinone at commercial scale, we manufacture quinones with properties ideal for use in agricultural, medicine, and many other fields.

<eatural Air Water Acquires Filwel Precision Polishing Pads Add New Strengths to Electronic Materials Operations</pre>

Filwel Co., Ltd., (headquarters: Hofu City, Yamaguchi; sales for year ended December 2018: 3.1 billion yen) manufactures and sells artificial leather and precision polishing pads. The company began as a project of Kanebo's R&D department. Its precision polishing pads, which are used in the manufacture of electronic devices, where ultra-high-precision surface finishing is required, account for approximately 70 percent of sales. For our part, adding precision polishing pads to our arsenal of products is a smart expansion of our electronic materials solutions, and as Filwel's head office and plant are located next to our own facility in Hofu City, we believe we can achieve considerable groupwide synergies through shared use of utilities. (Air Water completed acquisition of all Filwel shares on September 27, 2019.)

Air Water Acquires Daito Chemical Japan's Top Maker of Sodium Acetate Brings Unique Particle Control Technologies to the Mix

Daito Chemical Co., Ltd. (headquarters: Hiratsuka City, Kanagawa; sales for year ended March 2019: 7.7 billion yen) is Japan's foremost producer of sodium acetate used in food additives aimed at extending product shelf life and use in (among other applications) dialysis. The company has its own unique particle control technologies, and in addition to manufacturing and selling a range of industrial chemicals like sodium sulfite, also undertakes contract synthesis of organic chemical solutions such as low-molecular synthesis and polymer synthesis. Our intention is to harness Daito Chemical's organic synthesis capabilities and seek synergies in areas such as our production of medical and agricultural intermediates and electronic materials, so as to add further momentum to our functional chemicals business. (Air Water completed acquisition of all Daito Chemical shares on October 30, 2019.)

Medical Business



Business Facts

- Increasing demand for greater functionality and efficiency in the advanced healthcare segment
- Declining population and aging society driving increase in long-term care and preventive medicine needs
- \diamond Advancing healthcare in emerging nations

Core Strategy

- Select optimal strengths from the group's wide range of capabilities and concentrate to establish a solid foothold in the market for perioperative solutions
- Aim to spark further growth by working to improve revenues and establish new businesses simultaneously

Major Measures

- Harness the group's comprehensive strength to anticipate and fulfil all market needs
- Advanced medical solutions: Win all-encompassing orders covering perioperative equipment, peripheral equipment, and medical services
- Lifestyle medical solutions: Develop new dental and oral care products and reinforce sales structure
- Community medical solutions: Expand our share of the medical gas market in conjunction with VSU roll-out
- Global medical solutions: Boost global sales of perioperative equipment and injection needles

2 Improve revenues

- Rectify pricing and improve procurement costs for medical services
- Improve productivity in the manufacture of injection needles and sanitary materials
- 3 Expand disaster prevention operations (i.e., at Air Water Safety Service)
- Expand fire-extinguishing equipment business

4 Create new businesses

 Launch business operations relating to 8K endoscope cameras, video systems, and regenerative medicine using dental pulp stem cells

Revenue & Operating Profit (IFRS) (unit: million yen)



Review of FY2018

In the advanced medical solutions segment, a trend toward using less medical gas and the exhaustion of potential for new orders for hospital equipment has left us in a tough position. Conversely, medical services progressed robustly, buoyed by the acquisition of new clients for in-hospital SPD (Supply, Processing and Distribution Service) and inventory management systems, as well as streamlining in material procurement and rectification of prices received for sterilization services. Meanwhile, the government's revision of medical remuneration led to growth in sales of high-pressure oxygen devices, providing new wind in the sails of our medical equipment business. Meanwhile, our hospital equipment business in Singapore performed well.

The lifestyle medical solutions segment was buffeted by the severity of the market for home medical care and sanitary materials, as well as rising logistics costs in the dental segment.

Net Sales & Ordinary Income (unit: million yen)



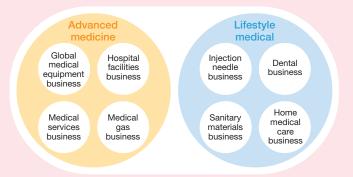
While potential for new hospital equipment orders has been exhausted, the demand for higher hospital functionality and efficiency is expanding needs. In order to keep abreast of these new needs, we are striving to position ourselves as an all-round provider of perioperative solutions by offering a comprehensive range of solutions by adding peripheral equipment, sterilization, surgical kits and other disposables to our existing line-up of operating theater and ICU equipment. To that end, we established Air Water International Advanced Medical Center, a broad-ranging hub for R&D and information dissemination at the Kobe Biomedical Innovation Cluster. At the same time, we are working hard to develop products with a difference, such as endoscope cameras and surgery video systems using 8K imaging technology.

Business Overview and Features

Here, we offer a broad spectrum of products and services, from sophisticated medical solutions underpinning the increasingly advanced healthcare sector to lifestyle medical solutions. The former includes state-of-the-art hospital equipment, medical gas supplies, contract hospital services, and equipment maintenance, while the latter includes dental supplies, sanitary materials, injection needles, and other items needed by local clinics and home care providers.

Relevant SDGs

- Providing products and services for advanced medical treatment
- Providing lifestyle-related products
- Contributing to the enhancement of infrastructure through disaster prevention projects



Advanced Medicine



Hospital Equipment

We have the largest share of Japan's market for the design and installation of operating theaters, ICUs, and medical gas piping systems. We have the versatility to offer everything from basic systems to specialized solutions for ultra-advanced surgical facilities.

Advanced Medical



Medical Gas

From medical oxygen (for which we have the top share of the Japanese market) to sterilizing gas and liquefied helium for use in MRIs, our nationwide network ensures we can offer a stable supply of medical gas throughout Japan.

Lifestyle Medical



Dental

We manufacture and sell dental and orthodontic equipment for dental clinics and orthodontists, and offer online sales of dental care products in general. We are also working to establish regenerative treatments using dental pulp stem cells.



Medical Services

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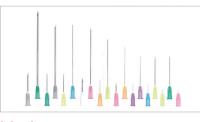
Air Water helps hospitals to operate more efficiently by providing medical outsourcing services to support hospital management and operations, including in-hospital logistics management and the sterilization or disinfection of medical instruments.

Lifestyle Medical



Home Medical Care

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



Injection

Air Water manufactures general hypodermic needles as well as a variety of other needles for dental, aesthetic, and veterinary purposes using outstanding grinding and machining technologies in Japan, and exports them to over 80 countries around the world.



We offer an extensive menu of equipment

sales and maintenance, including surgical

devices like 8K rigid endoscopes, hyper-

baric oxygen chambers, and respiratory

Sanitary Materials

Medical Equipment

equipment.

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

Disaster Prevention



Disaster Prevention

Responding to disaster situations requires a variety of gases, which we provide through fire extinguishers and air respirators, and with our own fire-fighting and earthquake-resistance test facilities, we are uniquely positioned to offer protection through safer products when communities need them most.

Energy Business



Business Facts

- Energy consumption down due to declining population and global warming
- Shortage of people to take over LPG retail businesses
- Market competition following deregulation of electricity and city gas supply markets
- \diamondsuit Switch to clean energy amid efforts to minimize carbon emissions
- \bigcirc Mergers of major wholesalers

Core Strategy

- Increase market share in Hokkaido, principally through stronger direct sales of LPG
- Expand industrial energy operations and reinforce lifestyle-oriented operations

Major Measures

1 Strengthen direct sales of LPG for civil use (increase direct sales from 250,000 customers in

FY2018 to 300,000 by FY2021)

- Strengthen direct sales through mergers and acquisitions
- Increase customer numbers and lock-in potential/existing customers through enhanced lifestyle-oriented operations and services
- Launch new model of the VIVIDO hybrid water supply and heating system

2 Expand industrial energy operations (LPG, LNG)

- Strengthen our in-house distribution platform and expand sales of industrial LPG
- Promote switch from fuel oil to LPG and LNG
- Expand operations relating to LNG equipment

3 Strengthen LPG purchasing power

 Strengthen LPG purchasing power by expanding industrial LPG operations and global operations

Revenue & Operating Profit (IFRS) (unit: million yen)



Review of FY2018

Measures aimed at increasing customer numbers, coupled with a concerted push to drive direct sales by acquiring distributors' commercial rights, sparked solid increases in civil-use LPG customer numbers and volume sold, and ensured solid performance in this segment. Conversely, equipment sales trended low—perhaps because exhibitions and spot sales events were cancelled in the wake of the Hokkaido Eastern Iburi Earthquake in 2018—while rising distribution and security costs also had an impact. Industrial LPG operations tracked robustly. Factors included a large increase in sales volumes, buoyed by close coordination with local operators nationwide aimed at encouraging customers to switch their fuel from heavy oil to LPG.

Warmer winters are dampening demand for kerosene, resulting in a significant drop in sales volumes, but innovative purchasing strategies and more efficient distribution kept the impact to a minimum.

Meanwhile, the ultra-low-temperature expertise built up through our Industrial Gas Business is paying dividends elsewhere, such as in the form of solid sales of LNG tank trucks.

Net Sales & Ordinary Income (unit: million yen)



The civil-use LPG market environment is increasingly fraught, buffeted by decreasing consumption caused by Japan's declining population and climate warming and extreme competition with electricity and city gas supply. We are endeavoring to weather the storm by increasing direct sales as a percentage of sales overall (for instance by acquiring distributors' commercial rights) and teaming up with the group's lifestyle-oriented operations, such as those relating to energy retail and home renovations, to bolster our range of customer services. In this way, we aim to increase our share of the Hokkaido market.

Strengthening our in-house distribution platform in Honshu has propelled efforts to encourage customers to switch their fuel to industrial LPG, and given that the LNG market is predicted to expand, we will focus on capturing sales and developing new equipment in this area, too.

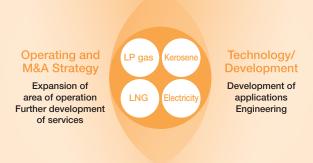
Business Overview and Features

Air Water has been supplying LP gas and kerosene as energy for daily life to general households, commercial facilities, hospitals, and other public facilities, and also as energy for industrial uses to plants. Air Water is also engaged in the supply of LNG as well as the manufacture and sale of LNG-related equipment, playing an essential role in community life.

Relevant SDGs

- Stable supply of energy for daily life and industry
- Reduction of environmental load by promoting fuel conversion





LP Gas/Kerosene



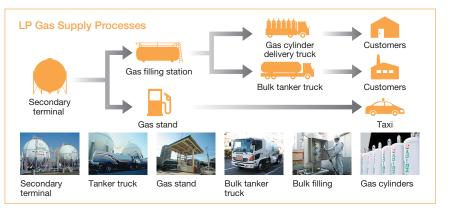
LP Gas

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



Kerosene

In Japan, kerosene is just as important an energy source as LPG, as it is used daily for water and heating. We work hard to maintain our framework for safe, stable, direct delivery of kerosene to households.





Energy Equipment

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



Mobile Power Source Cars

Mobile power supply vehicles generate electricity using easily procured LP gas as fuel, thereby playing an important role as emergency power providers during a disaster or power failure.

LNG



LNG-related Equipment

Utilizing ultra-low-temperature technology and unique know-how it has built up over many years, Air Water manufactures and sells LNG tanker trucks and transportation containers, for which it holds one of the top shares in Japan.



LNG Satellite Supply Air Water designs and installs unloading facilities for LNG transported to areas of demand by tanker trucks, etc., according to customers' usage requirements.





Electricity Retailing

Hokkaido Air Water, a regional business company of Air Water, collaborates with Hokkaido Electric Power Co., Inc. to sell electricity generated by Hokkaido Electric Power under the label "Air Water Electricity Powered by Hokuden."

Agriculture and Food Products Business



Business Facts

- ♦ Declining Japanese population leading to lower consumption and labor shortages
- ♦ Changing make-up of households (older occupants, more people living alone)
- Changes in food perceptions (health-conscious diets, demand for convenience)
- Abnormal weather making procurement of vegetables difficult
- \bigcirc Increased buying power of retailers

Core Strategy

Target the growth potential of the pre-made meal market, and use the group's ingredient procurement capacity, food processing plants, and sales networks to make vegetables a core weapon in our arsenal.

Major Measures

1 Strengthen our ability to procure a stable source of ingredient vegetables

- Triple the area of farmland under contract (to 30,000 hectares), and pursue development of vegetable farms in Japan and overseas
- Spread farming over different areas to reduce natural disaster risks; promote improvement of farming and preservation technologies
- 2 Add momentum to pre-made meal business through vegetables and processed livestock products
- Main target: pre-made meal products sold at supermarkets and convenience stores
- Build processing facilities near major consumption centers and provide those markets with high-quality vegetables processed to their desired degree

3 Strengthen our beverage business foundation

Expand our beverage market share through capital investment

Revenue & Operating Profit (IFRS) (unit: million yen)



Review of FY2018

In the agriculture business, although we managed to expand sales by establishing new vegetable retail outlets, operations were impacted by the one-off costs of setting up those stores and wild fluctuations in vegetable market prices. On the other hand, sales of agriculture machinery grew, and the overall performance of the agriculture business was solid.

The food solutions business suffered from stagnant sales of confectionery and ongoing depression in the ham and sausage sector. Conversely, growth in frozen vegetable sales and production efficiencies in our food processing operations, combined with the consolidation into the Air Water Group of a producer of frozen cooked meals, ensured that profits remained robust.

In the beverage business, increases in labor costs and depreciation resulting from capital investments were balanced by growth in orders for production of vegetable drinks and teas. These, combined with structural reforms in our home delivery water operations ensured strong performance overall.

Net Sales & Ordinary Income (unit: million yen)



Labor shortages in the food service industry have driven demand for frozen vegetables and frozen cooked foods as a means of eliminating some cooking processes and ensuring diners' orders can be filled quickly. On the other hand, we are faced with the challenge of navigating the effects of climate change to source stable supplies of ingredient vegetables in Japan and overseas.

To that end, we are putting systemic improvements in place, such as bolstering our procurement strengths (particularly in Kyushu and the Kanto region), making sure we contract with farms in multiple regions, and utilizing our overseas produce purchasing hubs to ensure a stable supply of high-quality vegetables. In 2019, we made Ecofroz, an Ecuadorian producer of broccoli and other foods, a subsidiary of the Air Water Group.

Meanwhile, we will continue with capital investments aimed at keeping abreast of changing client needs in the beverage business in order to win more orders.

Business Overview and Features

The Agriculture and Food Products Business started with sales of frozen foods utilizing liquid nitrogen. Through the integration into the Air Water Group of functions ranging from vegetable production to the distribution of processed foods and beverage products across Japan, the Agriculture and Food Products Business is creating a new value chain that maximizes group synergies.

Relevant SDGs

- Improving stability and
- productivity of agriculture Stable supply of safe and
- secure food products



- Reduction of waste and loss



Agricultural and Processed Foods



Ham and Deli Meats

With the top share of Japan's cured/uncured hams market, we offer discerning customers throughout Japan top-guality ham and deli foods in three brands: Syunsetsu, Sagami Ham, and Daisen Ham.

Agricultural and Processed Foods



Agricultural and Processed Foods Air Water manufactures high-quality frozen vegetables such as broccoli, sweetcorn, and pumpkin as well as flavorsome cooking sauces, and satisfies the needs of professional chefs and the food service industry by proposing new applications and menus.



Sweets

Taking advantage of its strength in product development, Air Water offers a wide range of confectionery, mainly chilled desserts, for both general consumers and businesses. In September 2018, a state-of-the-art plant was completed in Atsugi City, Kanagawa Prefecture.

Beverages

own brands.



Cultivation

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

Beverage



Water Delivery

Air Water delivers snowmelt water from the Northern Alps to the homes of its customers by employing the non-heating method to maintain the original natural taste of the water.



Procurement and Processing

With over 700 contracted farmers in Japan alone, we have considerable purchasing power, and provide customers nationwide mealtime favorites like frozen pumpkin from Hokkaido as well as grated daikon radish in volumes suitable for industry use.

Independent Food and Farming



Air Water manufactures and sells agricultural machinery that supports Hokkaido's industry, such as beet harvesters and cultivators.



Vegetable and Fruit Beverages

Air Water sells vegetable juices, of which it

has the largest OEM production share in

Japan, as well as other high-quality bever-

ages, both on an OEM basis and under its

Distribution and Sales

We offer safe and delicious vegetables and fruit to customers via the nationwide network of Kyushuya fruit and vegetable specialty stores and Takaya Shoten, a wholesaler at the Otsu Market.

Logistics Business



Business Facts

- \bigcirc Demand for improved working practices, shortage of drivers
- Long-term declining trend in Japanese freight transport
- Average 2% p.a. growth in low-temperature food distribution market
- Diversifying cargo owner needs and advanced quality control requirements

Core Strategy

- Occupy the position of no. 1 provider of quality services in the low-temperature freight transport domain, and create new businesses in that space
- Build a nationwide network for low-temperature freight transport

Major Measures

- Leverage our quality, technology, and infrastructure strengths to create new businesses in the low-temperature logistics space
- Establish a dominant position in Hokkaido markets through deeper mining of local potential (e.g., Sapporo, Chitose)
- Establish a low-temperature network (i.e., Atsugi, Oarai) covering the Kanto region
- Try to gain a foothold in the West Japan (e.g., Kinki, Kyushu) low-temperature logistics space

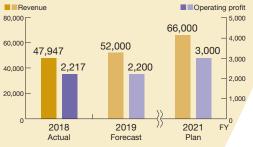
2 Further strengthening and expansion of core businesses

- Use ferries to wring further potential from our container network
- Seek further efficiencies and labor savings in transportation operations, and revise prices
- Acquire vehicles, business places, workers, and commercial rights through mergers and acquisitions

3 Integrate the group's logistics

 Promote cooperation among agriculture and food products, industrial gas, energy, and medical businesses

Revenue & Operating Profit (IFRS) (unit: million yen)



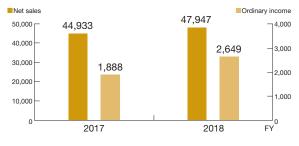
Review of FY2018

The transport business performed solidly, buoyed by an increase in freight volumes arising from the acquisition of new clients and better balancing of arrivals and departures of containers to and from Hokkaido and Honshu.

Our third-party logistics business, which mainly involves food transport, also performed well, boosted by the start of chilled deliveries for major convenience store chains. Although rising labor costs and diesel prices meant the business climate remained severe, diligent negotiation with clients ensured we received appropriate prices, which kept the impact of rising costs to a minimum.

Expanded sales for specialized vehicles, combined with improved earning capacity thanks to the previous year's capital investments, ensured solid performance in the vehicle body business (i.e., design and mounting of truck bodies and chasses).

Net Sales & Ordinary Income (unit: million yen)



Outlook for FY2019

In light of projected ongoing growth in the low-temperature logistics segment, an area of strength for the Air Water Group, we are focused on building a logistics network around the Low-Temperature Logistics Center. Fiscal 2019 saw work on the construction of centers in Ibaraki Prefecture and Chitose City, Hokkaido, and using these as key midway points in Hokkaido and Kanto deliveries will allow us to better eliminate wasted truck capacity and thus improve efficiency.

Meanwhile, the chronic shortage of drivers and the resulting increase in delivery costs and in-warehouse labor costs will continue to be a challenge, but we aim to counter those trends with better work efficiency and correct pricing.

Business Overview and Features

The Logistics Business started with the transportation of high-pressure gases, such as industrial and medical gases. Today, the business has expanded into a variety of fields, including food logistics (mainly 3PL), medical logistics for the transportation of blood, general cargo transport, container transport, and even design and mounting of truck bodies, etc.

Relevant SDGs

- Stable supply of industrial and medical gases
- Providing high value-added logistics services
- Efforts to improve logistics efficiency





Logistics



High-pressure Gas Transport

Air Water delivers high-pressure gases such as oxygen, nitrogen, and argon by the optimum transport means, ranging from liquefied gas tank trucks to trailers, in a safe and speedy manner. The transport know-how and constant low-temperature technology, which have been developed for high-pressure gas transport, have provided the basis for various logistics services that Air Water offers today.



Medical and Environment

Taking advantage of its advanced constant low-temperature technology developed through transportation of high-pressure gases, Air Water conducts all types of transportation related to blood collected at blood centers around the country, including transportation of raw blood plasma, blood samples, raw blood, and blood for transfusion.



Transport

Utilizing the transportation network centered on Hokkaido that connects the sites around Japan, Air Water transports all types of cargo, from construction materials and general cargo such as livestock feed and fertilizers to food and beverages, in different temperature zones, from room temperature to chilled to frozen. The transport business is also available for container transport using ferries between Hokkaido and Honshu.



Vehicle Bodies Mounting

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



3PL

Mainly in the food logistics field, Air Water aims to provide efficient and high added-value logistics services bv comprehensively taking care of the entire logistics operations of shippers, business restructuring, and management.



The Group's Nationwide Distribution Network (As of March 31, 2019)

Mainly in the Hokkaido, Tohoku, and Kita Kanto regions, Air Water maintains a cold chain for convenience stores and supermarkets. It is also involved in the production of specialty vehicles. The group also leverages its temperature control technology to provide logistics services for the transportation of raw blood plasma.

Seawater Business



Business Facts

- Obemand for salt is down due to declining population and low-sodium diets
- Expanding environmental market due to more stringent regulations
- Expanding demand for infrastructure improvements (e.g., sewer systems)
- Expanding demand for electricity infrastructure (e.g., magnetic steel sheets for transformers)

Core Strategy

Use product and technology development and mergers and acquisitions to expand existing operations (e.g., environmental business) and nurture new enterprises, thereby diversifying seawater-based business.

Major Measures

1 Expand environmental business

- Expand sales of water and soil treatment agents in Japan and overseas
- Expand business domains through mergers and acquisitions

2 Expand power generation business

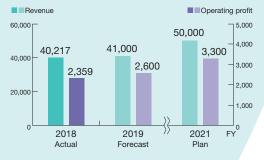
Commence operations at Ako No. 2 Power Station

3 Revamp magnesia business

Improve operating rate of Hibikinada Plant and create new businesses; expand sales of magnesia for magnetic steel sheets

4 Establish Seawater Research and Development Institute

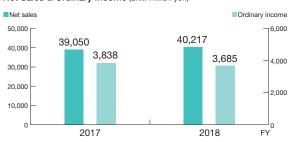
- Develop new products based on separation and refining of seawater elements
- Revenue & Operating Profit (IFRS) (unit: million yen)



Review of FY2018

Our Seawater Business was buffeted by strong headwinds in fiscal 2018, including the collapse of a large-scale water treatment facility project received in fiscal 2017 and construction delays caused by torrential rains in West Japan. Nonetheless, the Nihonkaisui Group's successful raising of industrial salt prices ensured that revenues in this segment remained robust.

The Tateho Chemical Industries Group saw increased sales of general magnesia products such as those for fire-resistant bricks, but a sharp increase in the price of fused magnesia (used in heaters) in the first half of the year, coupled with a temporary drop in demand for magnesia for magnetic steel sheets, resulted in a disappointing year.



Net Sales & Ordinary Income (unit: million yen)

Outlook for FY2019

In April 2019, the Air Water Group established a new seawater company, which brought the Nihonkaisui Group, Japan's foremost salt producer, and the Tateho Chemical Industries Group, a manufacturer of industrial magnesia, into the fold. Under the leadership of the seawater company, we will endeavor to spark maximum synergies from the combination of Nihonkaisui's and Tateho's R&D, production technologies, and markets. Through aggressive mergers and acquisitions and cooperation with other companies, we will also strive to expand existing operations, such as in the environmental segment, and nurture new enterprises. Through these activities, we are determined to expand our seawater-related business.

Moreover, we look forward to enhancing our seawater technology R&D in the run-up to the opening of the Seawater Research and Development Institute in the spring of 2022.

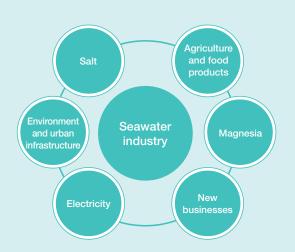
Business Overview and Features

Our Seawater Business is based on a long tradition of salt production, and we are proud to hold the top share of the Japanese industrial and household salt markets. Our operations in this segment are aimed at upholding the stable supply of this basic necessity, and providing seawater-derived foods and environmental products. Beyond these, we pursue a variety of activities aimed at extracting maximum potential from seawater. For instance, our crystal control technologies enable us to develop high-value-added magnesia products.

Relevant SDGs

- Offering water treatment services
- Offering environmental products





Salt



Salt

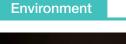
Nihonkaisui Co., Ltd., the leading producer of salt in Japan, provides a stable supply of high-quality salt products to regions throughout Japan from its Ako and Sanuki plants.

Electricity



Woody Biomass Power Generation In 2015, the Ako Plant of Nihonkaisui Co., Ltd. introduced an integrated cogeneration power system that uses woody biomass and natural gas. The generated electricity is used for its own purposes and also sold.

Magnesia





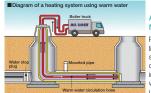
Water and Soil Treatment Agent Air Water is utilizing seawater resources and technologies to expand a wide range of its business areas, particularly environmental products such as absorbent for water and soil treatment and magnesium hydroxide.

Agriculture



Agricultural Fertilizers

Nihonkaisui Co., Ltd. utilizes seawater resources to supply potassium chloride, one of the three major fertilizers, for fertilizer manufacturers. The company is exploring applications of seawater resources other than fertilizers with the aim of further expanding its business.



Urban infrastructure

All Liner Method Forming a resin liner pipe inside a sewer pipe to cure problems inside the pipe without digging up the ground

Regeneration of Sewer Pipes

Aquaintec Corporation employs the "All Liner" method, an innovative technology to regenerate aged underground pipes without digging up the ground, thereby contributing to safe and comfortable communities.

Food Products



Seawater-derived Food Products

Air Water has commercialized bittern generated in salt production processes as a food additive. The company also offers products from seaweed grown in the Ariake Sea, Kyushu, as well as Italian food ingredients and seawater-derived mineral water.



Magnesia for Oriented Electromagnetic Steel Sheets

Oriented electromagnetic steel sheets, used as the iron core of a transformer, etc., are indispensable for electric devices. And magnesia is a raw material indispensable for the manufacturing of electromagnetic steel sheets.



Magnesia for Heaters and Insulation Materials

Mainly used as insulating filler for sheathed heaters, which are used as heating elements in a broad range of equipment, from home appliances such as electric rice cookers, irons, and hot plates to various types of industrial heating equipment.



Magnesia for Fire-Resistant Materials

Magnesia is a key ingredient in the mag-carbon bricks used for particularly demanding applications, like lining steel-works' converter furnaces.

Aerosol Business

Business Overview and Features

The Aerosol Business provides various aerosol products and liquid-filled products that have today become indispensable in our daily life and business activities. By making use of its advanced gas technologies, it offers products ranging from quasi-pharmaceutical products, cosmetics, and household commodities to industrial items.

Relevant SDGs

 Reduction of environmental load by using alternative CFC



Business Overview

Air Water conducts a broad range of businesses on an OEM/ODM basis, flexibly responding to diverse needs of customers by manufacturing aerosol products and other liquid-filled products in both large and small lots, from items for the human body and household commodities to paint, automotive parts, and industrial items.

Production Sites

Four sites in Japan manufacture aerosol products and liquid-filled products. The Gifu Plant excels in the manufacture of paint while the Gunma Plant has strengths in cosmetics and items for the human body. The Ibaraki Plant is capable of manufacturing all types of products, including pharmaceutical and guasi-pharmaceutical products, industrial items, and other miscellaneous goods. Meanwhile, the Sanyo Plant produces liquid-filled products for gardening applications. In this way, each plant is unique, and the combined network enables us to provide the right products to fulfill customers' needs.



Research and Development

With the aim of satisfying customers, Air Water's research and development is focused on launching onto the market safe and environment-friendly aerosol products developed from unique ideas. Based on the pursuit of quickly responding to customer demand by utilizing data in the broad fields in which Air Water has experience in formulation development, we conduct marketing for upcoming demands and needs, and offer new solutions.

Onward and Upward: Custom Manufacturing of Cosmetics

The expansion of cosmetic markets in Japan and overseas have transformed this into a growth sector (especially production of liquid cosmetic-filled products under consignment), and we are working to turn our foothold into a full-blown operation. Construction of a second plant on the site of our existing Ibaraki Plant was completed in November 2018, and a new research facility is scheduled for completion, also at Ibaraki, in 2020, armed with around four times the equipment currently in place. We intend to make this another core pillar of our business alongside aerosols; strengthening our R&D



-eature

Ibaraki No. 2 Plant

capabilities relating to the OEM production of cosmetics will enable us to develop better quality products with higher added value, while cooperation between our production and research functions will bring new efficiency and urgency to our product development framework.

Major Products

Items for Human Body

Hair spray, hair dye, hair care spray, hair mousse, hair growth tonic, natural water/lotion spray, shaving foam, UV cut spray, asthma drug, anti-inflammatory analgesic, etc.



Household Commodities

Pesticide, glass cleaner, room deodorant, shoe deodorant, waterproof agent, antistatic agent for clothes, disinfectant spray, portable fire extinguisher, cooking spray, pet items, gas cylinders for portable cookers, dust blower, etc.



Paint

Repair paint for automobiles, household paint, construction paint, etc.



Automotive and Industrial Items

Defogger, glass polisher for cars, tire/leather protectant, carburetor cleaner, brake cleaner, car air conditioner deodorant, anticorrosive lubricator, metal flaw detector, mold release agent, adhesive, etc.



Other **Businesses**

Business Overview and Features

With unique technologies and products such as O-rings, ECOROCA® building material made from recycled wood, and NV metal surface treatments, our operations in this segment underpin the growth of the Air Water Group. It is also an area of exciting frontiers as we pursue new ventures such as power generation using woody biomass.

Relevant SDGs

- Providing construction materials using waste materials and waste wood (ECOROCA®)
- Woody biomass power generation by effectively using thinned wood and PKS (palm kernel shell)



Electronics Materials

Leveraging its global network, Air Water offers a wide range of chemical products for various industries, from basic chemicals to high-purity chemicals, electric insulating materials and resin molded items for the electronics field. Air Water also jointly develops materials for customer products with manufacturers and provides state-of-the-art information and materials.

BELLPEARL®

Air Water offers "Bellpearl®," an environmentally friendly particulate phenolic resin; "Bellfine[®]," a functional new carbon made by the highly controlled burning and carbonizing of Bellpearl resin; and "Bellswing[®]," a PSA-type nitrogen gas generator that uses Bellfine carbon as an absorbent.





O-rings

types of seal materials such as rubber O-rings and other rubber products for industrial use. For semiconductor manufacturing systems, it offers a lineup under the Pororoca brand of ultra

Air Water manufactures and sells various



high-performance rubber O-rings. Recently, it has developed and started selling O-rings made of perfluoroelastomer (FFKM), which have the world's highest level of heat resistance, and O-rings made from general-purpose fluoroelastomer rubber (FKM).

ECOROCA®

Air Water manufactures and sells ECOROCA®, a new compound recycled material made from underutilized resources such as waste wood and waste plastic. Delivering excellent strength and safety while maintaining the texture of wood, ECOROCA® is used as decking material, louver material, and wall material at various sites, mainly public facilities



Electricity

Our Industrial Gas Business consumes a vast amount of electricity in its manufacturing processes. To ensure business continuity in all circumstances, including major disasters, we believe it is crucial to become self-sufficient by securing baseload power. To this end, we have begun power generation using woody biomass, a renewable energy source.

Air Water & Energia Power Yamaguchi (Hofu City, Yamaguchi)



Woody biomass and coal co-fired power generation Generation capacity: approx. 112,000 kW (Began operations in July 2019

See Feature 1 "Using Renewable Energy to Generate Electricity" for details.

Air Water & Energia Power Onahama (Iwaki City, Fukushima)



Woody biomass mono-fired power generation Generation capacity: approx. 75,000 kW (Start of operation scheduled for April 2021)

NV (Metal Surface Treatments)

We offer a range of unique surface treatments, including: NV nitriding, which uses gas activation and atmospheric control to improve the abrasion resistance of metal; Pionite, which hardens stainless steel without compromising its corrosion resistance; and CR-NITE, which can withstand 1000°C temperatures.



SiC

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

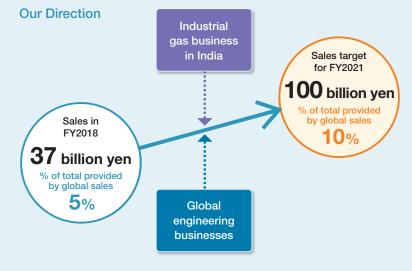


Global Business

Air Water, is moving forward with global business expansion, as a powerful driver for its growth in 202 and beyond.

Global Expansion and Future Approach

To date, the Air Water Group's growth has been founded on a strategy of diversification within Japan. That strategy has worked: we now have an all-weather portfolio that provides for stable growth in all conditions, and by the end of the current mid-term management plan, we will have completed the nationwide roll-out of VSU plants-the core measure of our plans for the Japanese industrial gas business-and gained enough momentum in our power generation business to provide high revenues for 20 years. In that sense, the end of the current plan marks a major transition point for the group. Moving forward, we are determined to continue pursuing solid growth with our all-weather conglomerate of businesses in Japan, and to balance this by expanding our global operations as a means of seeking significant growth in markets where high earning capacity is forecast.



denotes recent global M&A

Air Water Group Global Operations As of September 2019

- ◎ Business sites: 63 companies in 16 countries
- Sales: 37 billion yen (FY2018)
- Workforce: 4,260 (incl. 66 on secondment from Japan)





Entering the Indian Market

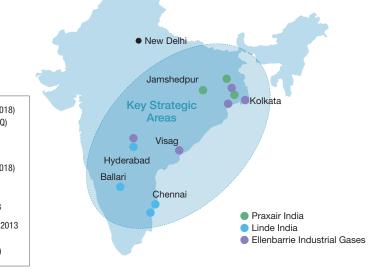
Establishing a Sure Foothold in High-GDP-Growth India

When Plaxair (USA) and Linde (Germany) merged, we acquired some of their industrial gas operations in India. One we took over was an onsite gas supply business for steelworks, an area in which we already have a considerable track record in Japan. Another was a liquefied gas production and supply business, which perfectly complements our existing subsidiary, Ellenbarrie, which deals with cylinder and tank truck supply. These acquisitions have enabled us to establish a strong foothold in the Indian industrial gas market.

Industrial Gas Business Growth Strategy in India

- Satisfy rising demand for industrial gas caused by increasing crude steel production in India
- Expand onsite supply contracts for small and mid-sized plants
- · Seek further synergies with Ellenbarrie to boost market share in
- and around southeast India

Acquisition of Praxair India's business	Size of business: Acquired in: Price: Facilities:	Approx. 7.9 billion yen (year ended December 2018) July 2019 (consolidated starting from FY2019 2Q) Approx. 23.8 billion yen 3 × ASU; 2 × filling stations
Acquisition of Linde India's business	Price: Facilities:	Approx. 5.7 billion yen (year ended December 2018) Approx. 20.4 billion yen 1 × ASU; 2 × filling stations ent regarding acquisition executed on August 13
Ellenbarrie Industrial Gases	Established: Facilities: Size of business:	1973 (became an Air Water Group subsidiary in 2013 $3 \times ASU$; $5 \times filling plants$ Approx. 2.6 billion yen (year ended March 2019)





Global Engineering Businesses

Our global engineering businesses are centered on two main operations: industrial gas engineering and equipment, mainly in North America, and high-power UPS systems. Here, we endeavor to build a foundation strong enough to uphold sustainable growth.

Industrial Gas Engineering and Equipment

We are working hard to establish an engineering and equipment framework with a view to pursuing industrial gas supply in the North American market.

In addition to bolstering our line-up of solutions by acquiring companies with distinctive technologies and products, we hope to utilize our network of equipment manufacture and sales hubs to raise recognition of Air Water in the North American market. At the same time, we are endeavoring to enhance our engineering functions and forge partnerships with local gas distributors to pave the way for our VSU strategy.



High-Power UPS Systems

The market for high-power uninterruptible power supplies (UPS) is forecast to grow as construction of new semiconductor factories and data centers, spurred by the development of cloud computing and IoT, drives demand. We established a foothold in this sector by acquiring Power Partners (Singapore) in August 2018 and Hitec Holding (the Netherlands) in July 2019, both producers of rotary UPS.

Designed for high-power output above 1,500kVA, these devices are used mainly in data centers and large-scale semiconductor and pharmaceutical factories. By installing UPS, these facilities seek to mitigate the risk of damage caused by power outages and low voltage to ensure a continuous stable power supply. Our involvement in the UPS sector is part of our strategy to offer utility solutions such as power supplies and industrial gas. These are key elements for our customers' business continuity planning, and help to keep vital production facilities up and running.



High-Power UPS Growth Strategy

- Global market for high-power UPS systems is worth approximately 160 billion yen, and forecast to grow by at least six percent per year
- Potential intra-group synergies with Air Water Safety Service and industrial gas supplies for electronics manufacturers
- Use the group's network to deep-mine the Japanese market

Feature Air Water Buys Cryoplant Outright

On October 1, 2019, Air Water acquired Kobe Steel's 40% stake in the two companies' joint venture, Kobelco Air Water Cryoplant, Ltd. Upon becoming a wholly owned subsidiary of the Air Water Group, the company's name was changed to Air Water Cryoplant, Ltd. (AWCP).

If we are to advance our global industrial gas business, then a solid foundation of gas production plant technologies and engineering is vital, and in tandem with our endeavors in India and North America, we are also working to reconfigure our engineering system throughout Japan and around the world. The launch of AWCP, a designer and manufacturer of cryogenic air separation units, has not only allowed us to acquire technology regrading large-scale cryogenic air separation units, but also establishes us firmly as a comprehensive manufacturer of ASU systems able to provide everything from small and mid-sized solutions like V1 and VSU to mega-plants. We look forward to leveraging these plant-building strengths as a means of bolstering our ability to compete internationally in the industrial gas engineering space.

Research and Development

As a group that harnesses the Earth's resources to we must pursue a variety of pan-disciplinary R&D

Air Water's research and development is aimed at constantly sophisticating the core technologies developed in the industrial gas businesses and applying them to various other fields, such as medical and agriculture, while actively introducing new technologies under the open innovation initiative. Thus the continuous growth and robust development of technologies support the Group's All-Weather Management System.

Air Water's growth strategy also supports technology development of the entire group, encouraging further advancement of the group's high value-added technologies while also incorporating advanced technologies to create the technologies that will drive the further growth of the group.

R&D activities are conducted through close collaborations with relevant business divisions in each business field on themes set in view of future business needs. Such activities have generated various achievements that are useful to society.

Research and Development Domains

Industrial domains

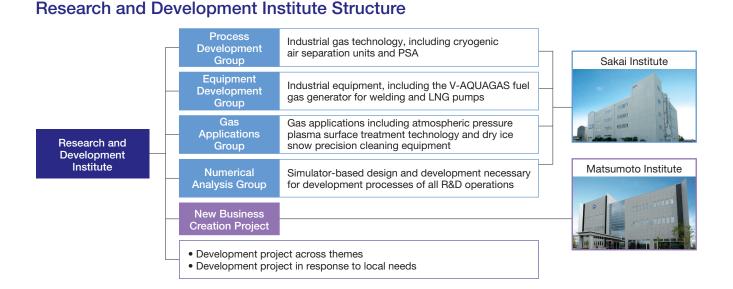
- Gas processing technologies
- Welding technologies
 Gas application technologies
- Low-temperature equipment technologies
- Gas collection and recycling technologies
- Energy solution technologies
 Metal surface treatment
- technologies
- Lifestyle-related domains
- Medical technologies
- Agriculture and food products technologies

Electronic material technologies

- technologies
- Fine chemical technologies
 New material technologies
- Plasma surface treatment
- ng technologies Functional resin and carbon
 - material technologies

 Numerical analysis
 - technologies

Research and Development Institute (Development Structure and Recent Achievements)



VHR Next-Generation Hydrogen Gas Generator

The VHR is a world-class hydrogen gas generator offering an innovative reformer structure and an optimized heat collection process. It also makes use of hydrogen purification technology to enable a high hydrogen recovery rate. Compared with the existing VH series, the VHR reduces city gas consumption by six percent and, reduces carbon dioxide emissions by ten percent (including the reduction in electricity needed to power the unit). Moreover, the VHR eliminates the need for oxygen additives used by previous systems, which helps reduce running costs by around 25 percent,



making it highly cost competitive.

Our first 300N m3/h unit

High-Purity Carbon Monoxide Generator Makes Effective Use of Carbon Dioxide

Our high-purity carbon monoxide generator uses catalysts from the VH series of hydrogen gas generators, and combines two existing technologies (i.e., the technology to create a mixture of hydrogen and carbon monoxide gas, and the technology to recover carbon monoxide) to cause a reforming reaction between the ingredient gases (carbon dioxide and natural gas), resulting in a mixed gas with a one-to-one ratio of hydrogen and carbon monoxide, which is then further refined. By making effective use of carbon dioxide and converting it into carbon monoxide, which is used in a broad variety



of industrial processes, these units help lower the burden on the environment.

A high-purity carbon monoxide generator

create new businesses, projects to seek new solutions for the benefit of all society.

Research and Development Structure



Air Water Biodesign

Health-oriented innovation in the medical, agricultural, and food sectors Air Water Biodesign, the group's state-of-the-art development center

Air Water Biodesign Inc. was incorporated in March 2019, and began operations at Air Water International Advanced Medical Center, which opened in Kobe two months later. The company is a development center focused on the medical, healthcare, and agriculture and food industries, and its 50 or so researchers and developers are experts in electronic engineering technologies like optical sensing, vital-sign processing, and data analysis. Here, our aim is to channel those strengths into R&D to come up with timely lifestyle solutions matched to specific needs among our clients and in the community relevant to the medical, agricultural, and food space.

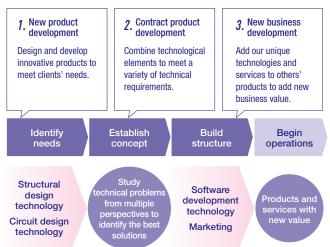
Biodesign

In 2001, together with his colleagues, Dr. Paul Yock of Stanford University developed a curriculum that brought multi-perspective study (incorporating disciplines such as medicine, engineering, business planning, and product design) to the initial stages of the development process in order to inject innovation into the development of solutions to problems that arise in medical work.

Air Water Biodesign incorporates those processes as a way to speed up development of products and businesses.

Air Water International Advanced Medical Center: The R&D Facility Where Air Water Generates Ideas for a Healthier Tomorrow

Located in the Kobe Biomedical Innovation Cluster (one of the largest medical clusters in Japan), Air Water International Advanced Medical Center is the Air Water Group's R&D facility for products and services aimed at bringing people healthier lifestyles. It began operations in May 2019. In addition to Air Water Biodesign Inc., one center occupant is Aeras Bio Inc., which is engaged in a range of R&D activities, including joint work with medical schools involved in regenerative medicine-with a particular focus on dental pulp-as well as moves to establish a "bank" of dental pulp stem cells. Another group company, Kairos Co., Ltd., endeavors to adapt 8K imaging technology for state-of-the-art medical applications. The ability to see, touch, and get an instinctive feel for Kairos's products-and, indeed, a range of other products and services-provides a clearer view of latent needs and ideas than might otherwise be possible. Then, the huge range of resources held by the Air Water Group can be harnessed to spark further innovation.





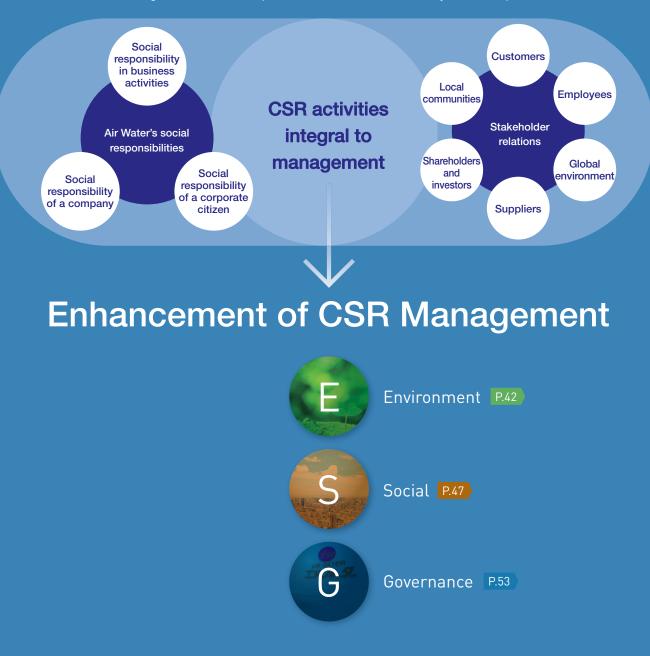
Air Water's Approach to CSR

The origins of our business can be found in its name, which consists of two words: "air" and "water." Our aim is to create businesses by making use of these natural resources and thereby contribute broadly to society and everyday life. This means that our business activities bear significant social responsibilities.

As our group companies cooperate in conducting diverse businesses to support social development and enriched living, we bear responsibilities toward a broad range of our stakeholders; namely, the "social responsibility of a company" to aim for growth together with its employees, shareholders, investors, suppliers, and other business partners through the sustainable growth of our group companies, and the "social responsibility of a corporate citizen" to contribute to the global environment and local communities, which is a basic requisite for a company that is demanded and needed by society.

For Air Water, CSR is an integral part of its management in all aspects. Since Air Water's management is inseparable from its CSR, we must further enhance our CSR management to achieve the group's sustainable growth.

Being constantly aware of its multifaceted corporate social responsibilities, Air Water will enhance its CSR management from the standpoint of its stakeholders, and thereby raise its corporate value.



nvironment

The Air Water Group's business activities are founded on harnessing natural resources like air and water. As such, not only is environmental conservation essential to sustainable corporate growth, but it is only right that we lead efforts to preserve the global environment for future generations. To that end, we have brought the issue front-and-center by establishing our key environmental challenge as "fighting climate change" in 2019, and the whole group is working hard to reduce greenhouse gas emissions.

- Key Performance Indicators
- Air Water Group Basic Environmental Policy
- Material Balance
- Fighting Climate Change
- Effective Use of Water Resources
- Effective Use of Food Waste

Key environmental challenge: Fightin<u>g climate</u>

change

Key Performance Indicators

Having made "fighting climate change" the group's key environmental challenge, we have established a greenhouse gas (i.e., carbon dioxide) emission reduction target to chart our progress, and announced that target as one of the group's KPIs in NEXT-2020 Final, our mid-term management plan.

Efforts to cut the group's carbon dioxide emissions and achieve that target are underway. They include the installation of high-efficiency plants and upgrading of existing plants groupwide, a thorough energy saving regime, and use of renewable energy sources.

In addition to our own efforts, we are working to calculate carbon dioxide emissions throughout our supply chain, beginning by gauging the emissions (scope 3) of suppliers, clients, and other relevant parties.



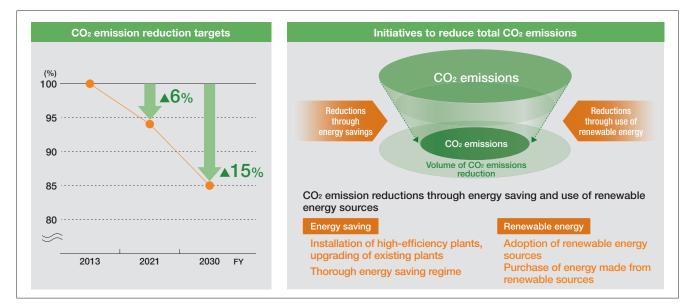
KPI: Rate of CO₂ emission reduction*

Mid-range target

Reduce by **6%** compared with FY2013 levels by FY2021

Long-range target

Reduce by **15%** compared with FY2013 levels by FY2030



*Scope

Manufacturing companies of the Air Water Group classified as Specified Business Operators under the Act on the Rational Use of Energy (incl. Air Water, Inc., and 22 other group companies)

Air Water Group Basic Environmental Policy

Basic Philosophy

We are concerned not only with harnessing air and water resources to make products that benefit industry and lifestyles, but also with ensuring our manufacturing benefits nature itself. Having served their commercial purpose, those resources should return gently and cleanly to their original environment. As a company founded on the laws of nature and the cycle of natural life, acting in accordance with this philosophy is our responsibility to future generations.

Basic Environmental Policy

- (1) We work on prevention of environmental pollution, global warming countermeasures (mitigation of and adaptation to climate change), effective use of resources, and reduction of chemical risk in all our business activities from research and development to production, sales, logistics, and service.
- (2) We research and examine the impact on the environment resulting from our business activities, establish technically and economically feasible goals for reducing environmental load, and promote environmental conservation activities. At the same time, we continually try to improve our environmental management system.
- (3) We comply with environmental laws and regulations, establish voluntary standards as necessary, and work for environmental conservation.
- (4) We select resources (facilities, raw materials, subsidiary materials,

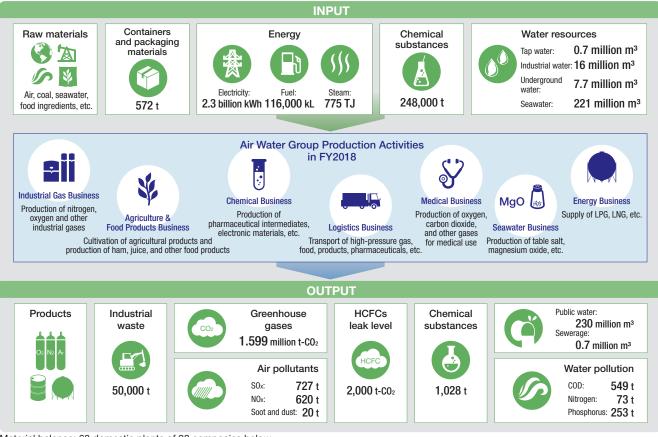
components, etc.) required for business activities that satisfy technological and economic demands, but which also have a small environmental impact and little negative effect on local residents and employees.

- (5) Our research & development gives consideration to the environment, safety, and quality, and provides products and goods and develops technologies that contribute to the environment.
- (6) We promote acquisition of the ISO 14001 international standard for environmental management systems, and arrange structures for implementing our Basic Environmental Policy.
- (7) We use internal publicity and other activities to boost the understanding and awareness of all employees regarding the Air Water Group Basic Environmental Policy. We disclose this Basic Environmental Policy to the general public.

Material Balance

Material Balance: Our Overall Environmental Impact

Providing customers with products created from the earth's natural resources such as air and water, and returning them to nature after they have been used. The Air Water Group's work is intimately related to the earth. We therefore promote reductions of our environmental load by tracking inputs like resources and energy and outputs like products and waste at our major manufacturing facilities.



Material balance: 68 domestic plants of 28 companies below

Scope of collection of environmental performance data

Air Water Inc. and 27 consolidated subsidiaries* (28 companies in total)

*Consolidated subsidiaries (as of FY2018) selected as having a high environmental load under the Air Water criteria (CO₂ emission coverage: 95% or above) 27 group companies Industrial Gas: 6 companies; Chemical: 2 companies; Medical: 2 companies; Agriculture and Food Products: 7 companies;

Logistics: 1 company; Seawater: 2 companies; Other: 7 companies

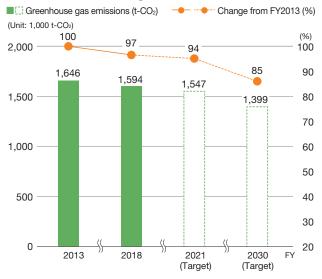
Fighting Climate Change

CO₂ Emission Reduction Targets

Here at the Air Water Group, we use vast amounts of energy and emit large volumes of carbon dioxide in our business activities such as producing oxygen and nitrogen at industrial gas plants. We are always striving to reduce carbon dioxide emissions, for instance through efficient plant operations and by using the latest high-efficiency equipment. In fiscal 2018, emissions by those group companies classified as Specified Business Operators under the Act on the Rational Use of Energy* were 1,594,000 t-CO2, approximately 3.2 percent below fiscal 2013 levels. Moving forward, we are enhancing our emission reduction initiatives with the aim of reducing total carbon dioxide emissions even further: six percent below fiscal 2013 levels by fiscal 2021, and 15 percent by fiscal 2030.

*Air Water Inc. and 22 group companies (23 companies in total)

CO₂ emission reduction targets



Third-party Verification of Greenhouse Gas Emissions

The Air Water Group discloses greenhouse gas emissions in the Air Water Report and on its website. To ensure that the data we provide are highly transparent and verified from an independent. objective perspective, we have received third-party verification for



Mid-to-Long-Term CO₂ Emission Plan

As part of the group's efforts to reduce greenhouse gas emissions over the mid-to-long term, those energy-hungry group companies classified as Specified Business Operators under the Act on the Rational Use of Energy have enacted a mid-to-long-term plan, which sets forth actions such as capital investment and improved operations. Under the plan, those companies are indeed working aggressively to cut emissions. Key initiatives stipulated in the plan for fiscal 2019 are shown in the table below.

Key Initiatives of the Air Water Group's Mid-to-Long-Term Plan to Cut CO₂ Emissions (From 2019 Onwards)

Target plants	Initiative (target year)	Reduction (t-CO ₂ /year)
Air Water Inc. Kashima Plant	oxygen plant	
Kinki Air Water Inc. Mie Gas Center	Upgrade equipment for reuse of nitrogen plant waste gas (FY2021)	4,904
Air Water Inc. Utsunomiya Plant	storage tank	
Gold-Pak Co., Ltd. Eniwa Plant	overall through upgrading of	

Initiatives to Cut CO₂ Emissions at **Industrial Gas Plants**

Using air to make oxygen, nitrogen, argon, and other industrial gases at our industrial gas plants takes vast amounts of electricity. The power supplied by utility companies is generated at thermal power plants, and in that way, we indirectly emit carbon dioxide-a serious challenge to our mission to cut emissions.

The Air Water Utsunomiya Plant replaced its old plant in 2017 with a VSUA plant (high-efficiency, compact, liquefied oxygen, liquefied nitrogen, and argon production plant) in an effort to achieve more efficient manufacturing. In fiscal 2017, the plant's carbon dioxide emissions were



following year. The Utsunomiya Plant is scheduled to upgrade its old storage tanks in fiscal 2019 to new models that reduce loss, thereby further cutting greenhouse gas emissions.

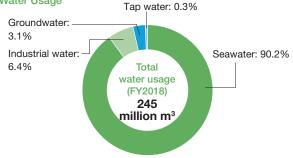
Toshifumi Imanishi Factory Manager Air Water Inc., Utsunomiya Plant

Effective Use of Water Resources

At the Air Water Group, many of our manufacturing businesses rely on water. Some 90 percent of the water we use is seawater, which is used for cooling the heat generated in the course of producing industrial gases and chemicals, and a plentiful source of salt, magnesium, and other elements.

Elsewhere, groundwater is used as an ingredient or coolant when making beverages (in our Agriculture and Food Products Business). Here, too, we are sure to use this precious resource as efficiently as possible, and we work closely with regional governments, residents, and businesses to help maintain the quantity and quality of the local water.

Water Usage



Efficient Use of Water at Beverage Plants

Gold-Pak is the Air Water Group's producer of beverages for major drink companies, and we focus mainly on making drinks in cans, paper cartons, and plastic bottles.

Beverage production involves the use of huge volumes of groundwater, so we are careful to use that precious resource as efficiently as possible. For instance, the Azumino Plant uses the same water three times. First, groundwater is used for air conditioning as it maintains a steady temperature all year round, but it is still clean after that, so it is reused in the beverage chilling process, and reused again at the wastewater



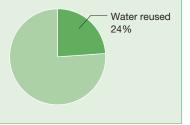
Toshiaki Momose Executive Officer and Production Manager Gold-Pak Co., Ltd.

Reuse of Groundwater at the Azumino Plant

treatment plant.

Water from other sources is also reused to eliminate waste. For instance, clean water from the production process is reused in boilers.

We are dedicated to making the most efficient use of resources possible to ensure our business is always in harmony with the natural environment.

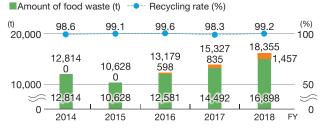


Effective Use of Food Waste

At the Air Water Group, we work aggressively to reduce food waste at our agriculture and food products business plants, and to recycle any waste that does arise. Naturally, we report to the government on the outcomes of these efforts, as required under Japan's food recycling laws. Groupwide, food recycling exceeds 95 percent of the government's target rate; in fiscal 2018, increased use of carrots to make vegetable juice and a jump in tea production meant more food waste was generated, but improved recycling meant the overall recycling rate exceeded the preceding year's figures. Moving forward, we are determined to improve the recycling rate through a range of initiatives, such as partnering with waste contractors to use vegetable scraps as fertilizers.

Food Waste and Recycling Rate

Increase (in tons) due to broadened scope of data, e.g., resulting from M&As (compared with FY2014)



Many Ways to Use Food Waste Effectively

At Tomiichi, we turn potatoes, pumpkins, daikon radishes, and other produce from Hokkaido into processed foods for sale nationwide.

Making pre-cut vegetables, for instance, inevitably leaves large volumes of offcuts and other waste, so we are serious about finding ways to use these effectively. In fiscal 2018, we recycled fully 100 percent of food waste; 97.6 percent was composted and the rest



recycled for livestock feed. In fact, we have achieved 100 percent recycling for the last six years, and we are determined to continue making efficient use of resources by recycling food waste.

Kota Kamata Production Manager Tomiichi Co., Ltd.

Food Waste Generated by Tomiichi



Message from the General Manager of the Compliance Center

Fighting Climate Change: The Whole Air Water Group Is Working to Cut Carbon Dioxide Emissions



Yukimasa Takeuchi Executive Officer & General Manager Compliance Center Air Water Inc.

Our Key Environmental Challenge

As the world maneuvers to limit environmental damage, for example through the Paris Agreement and Sustainable Development Goals, it is clear, in light of our philosophy ("we proudly dedicate ourselves and our resources to the creation and development of businesses linking air, water, and the earth"), that fighting climate change is one of our core responsibilities. Our wide-ranging manufacturing activities make us a major consumer of electricity and fuel, which is why we have made reducing overall carbon dioxide emissions our key environmental challenge. As part of this, we have publicly stated our KPIs for this initiative: reducing total carbon dioxide emissions to six percent below fiscal 2013 levels by fiscal 2021, and 15 percent by fiscal 2030. Why begin with six percent? When we aggregated the reduction targets of our various business sites, it came to around five percent; the extra one percent is a show of our determination. After that, we intend to increase the reduction rate by one percentage point each year until we reach 15 percent in fiscal 2030. These figures are far more aggressive than the 6.5 percent target for the industrial sector under the Japanese government's Plan for Global Warming Countermeasures and the 10.7 percent stipulated by the Japan Chemical Industry Association in its plan for a "low-carbon society," but we believe they are achievable when factors such as Japan's changing energy mix are taken into account.

Savings and Renewables: Dual Approach to Achieve KPIs

One key element of our efforts to achieve our KPIs is capital investment. Air Water Inc., and 22 other group companies are classified as Specified Business Operators under the Act on the Rational Use of Energy. In terms of company numbers, that is only around 20 percent of the whole group, but those companies account for at least 95 percent of the group's energy consumption. Unsurprisingly, all of these companies are working to cut carbon dioxide emissions, mainly by upgrading facilities to significantly improve their base rates of energy consumption. For instance, upgrading to state-of-the-art VSUA at Air Water's Utsunomiya Plant cut carbon dioxide emissions by 13 percent year-on-year in fiscal 2018—more than 4,000 tons of CO₂. Similarly, the company's Kashima Plant plans to reduce carbon dioxide emissions by almost 10,000 tons a year by fiscal 2021 (compared with current levels) by installing high-efficiency oxygen production units. In parallel to the adoption of efficient equipment, it is also vital what we work diligently every day to conserve energy, and each company is striving to do so from the bottom up. Through organized collection and administration of these various activities, we seek to build upon success to gain further achievements.

The other way in which we approach emission reduction is the use of energy made from renewable sources like woody biomass. In fact, our power generation operations bring dual benefits: not only are they a new way for us to cut carbon dioxide emissions, but they also provide us with our own power supply in disaster situations. Operating these power stations boosts our contribution to climate change solutions, and even allows us to sell excess electricity to the grid via the feed-in tariff system. In addition to the two existing power stations in Ako City, Hyogo, and Hofu City, Yamaguchi, three new facilities are scheduled to begin operations soon-a second unit in Ako (in 2020), and one each in Iwaki City, Fukushima (2021), and Kanda-cho, Fukuoka (2023). These power stations are designed to run on under-utilized resources from the local area and around the world, and to be carbon neutral so as to minimize impact on the local environments. When all of the power stations in planning begin operating, they will generate the equivalent of 80 percent of the Air Water Group's power consumption, and will effectively make a huge contribution to the reduction of carbon dioxide emissions.

A Groupwide Effort for SBT Certification

These are just some of the ways in which the Air Water Group is active in protecting the environment, but there is still more to be done. For instance, the group's publication of carbon dioxide emissions has been limited to Scope 1 (i.e., those emitted directly by the group by burning fuel) and Scope 2 (those emitted indirectly through the use of electricity). A group like ours really needs to calculate emissions throughout our supply chain, and that means Scope 3 (emissions of all companies relevant to the Air Water group's activities). Gauging the Scope 3 emissions of a conglomerate as broad and complex as the Air Water Group takes a gargantuan effort, but we are currently maneuvering to do so and look forward to expanding disclosure of Scope 3 carbon dioxide emissions in future.

Meanwhile, when NEXT-2020 Final, our current mid-term management plan, concludes in fiscal 2021, we establish to set even loftier targets for the subsequent years. We are determined to make a cohesive, groupwide effort to reduce carbon dioxide emissions with a view to being Science Based Target* certified.

*Science Based Targets are greenhouse gas emission reduction targets for companies, which are recognized as being in-line with current climate science. SBTs aim to keep the rise in global temperatures within two degrees Celsius of pre-industrial revolution levels.

Key social challenges

Harnessing

workforce potentia
 Diversity

Greater opportunities
 for female employees

ocial

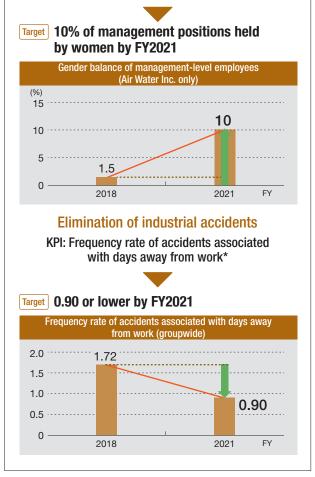
Products and services provided by Air Water contribute to people and society in broad fields, such as manufacturing, medical and nursing care, food, energy, and logistics. NEXT- 2020 Final, the mid-term management plan we launched in fiscal 2019, obliges the group to take action to address workforce potential (diversity and greater opportunities for female employees), improved compliance relating to quality, and elimination of industrial accidents. Improved compliance relating to quality Elimination of industrial accidents

- Key Performance Indicators
- Workforce Diversity
- Rewarding Workplace
- Offering Safe and Secure Products and Services
- Enhancing Supply Chain Management to Promote Fair Business Practices
- Pursuing Stable Return of Profits in Line with Performance and Building Trust
- Promoting Activities Closely Tied to and Rooted in Local Communities

Key Performance Indicators

Targets for improving the gender balance of management-level employees and reducing the frequency rate of accidents associated with days away from work are listed as KPIs in NEXT-2020 Final, our mid-term management plan.

Greater opportunities for female employees KPI: Gender balance of management-level employees



*Number of people involved in an accident per one million total working hours

Workforce Diversity (Commitment to Employees)

Basic Approach to Employees

The Air Water Group is made up of a variety of group companies engaged in a range of business activities. We protect the human rights of diverse personnel, respect their individuality and character, ensure safety and health, and strive to create workplaces that allow each person to work with energy and a sense of purpose.

Basic Policy on Human Resources

Respect for the Individual

We strive to establish programs that can be chosen by employees in order to respect the will of each and every individual.

Recognition of Ability and Performance

We appropriately recognize ability and performance without regard to age or educational background and structure compensation accordingly.

Personnel Development

We support each employee's desire for growth through a development-oriented support system and help them achieve their career plans through ongoing skill development and performance opportunities.

Workplaces for Women's Participation and Advancement

Women's Participation and Advancement Promotion Project

The Women's Participation and Advancement Promotion Project was launched in 2016 in order to further develop a corporate culture and workplace conditions that enable women to work with energy and a sense of purpose at the Air Water Group. The themes of the Project's activities are as follows:

- (1) Improving workplace culture: We offer training programs for management-level employees, such as a workshop on staff management, with the aim of establishing a nurturing culture.
- (2) Proactive hiring of women: As a result of our efforts to enhance the recruitment of women, which began in 2016, the recent three-year average of female employees among total new recruits exceeded 30% (which is higher than our initial target).
- (3) Support for career advancement: We modified the personnel system in fiscal 2018 so as to allow every worker to advance in his/her career; specifically, integrating clerical workers in the category of

area-specific management track. We also provided career training as a means for women to consider their careers over the mid-to-long term, as well as career management training for those women's managers. In addition, we provided opportunities for one-on-one career counselling, including discussions with managers and HR, as well as counselling with outside career counsellors.

- (4) Actively promoting motivated women: The number of female managers and supervisors (superintendent rank) has been steadily increasing. In particular, women now make up 13.4 percent of all superintendent-ranked employees, a significant rise over June 2018's figure of 8.8 percent.
- (5) Realizing work-life balance: We introduced programs to facilitate continued employment, such as a flex-time program, a leave of absence program (to be used upon a spouse's transfer), and a job return program. Other initiatives aimed at fostering a culture of healthy balance between work and family life for employees of both genders include encouragement for male employees to take childcare leave, and our own childcare leave system in addition to the regular system of leave.

Air Water Makes the MSCI Japan Empowering Women (WIN) Select Index

Air Water was selected for the MSCI Japan Empowering Women (WIN) Select Index in June 2019 in recognition of our efforts toward promoting female participation in the workforce. The index was developed by MSCI to boost investment in businesses with positive ESG (environment, social, and governance) credentials.



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Promoting a Healthy Work-Life Balance

Flexible Working Options

We want employees to become, and remain, motivated in their careers at the Air Water Group. As part of that, we offer various options regarding working schedules when major life events come calling.

(1) Flex time (when employees need to provide childcare or long-term care)



(2) Shortened working hours

(available until employee's child finishes 3rd grade of elementary school)

			•	,	'
	Less than 1 y.o. :	Up to starting elementary school (6 y.o.)	Up to the end of 3rd grade elementary school (9 y.o.)	Up to starting middle school (12 y.o.)	
Childcare leave	•		(Exten		
Shortened working hours			availa	ole)	
Flex time				••••	
Regular working schedule					

Support for Balancing Work and Nursing Care

In order to promote continued employment by employees providing nursing care to family members, Air Water has instituted various support programs related to working hours, including nursing care leave, vacation days, and a flex-time program.

Going forward, we will work to further develop employment conditions in line with Air Water's characteristics that help employees balance nursing care and job responsibilities.

Mental Healthcare Initiatives

A stress check program is among Air Water's comprehensive initiatives for employee mental health care, which we conduct on a planned, ongoing basis.

The results of the stress check are conveyed directly by the outside professional organization to the employees checked, and employees are also able to consult with specialists via an outside consultation desk without going through the company. In addition, when submitting a request to the company, employees are able to talk with an industrial physician or other specialist and receive guidance.

Personnel Development

Skill Development

At Air Water, we use the following training systems to help our people attain the skills they need in current and future positions, thus encouraging employees to develop their own careers.

(1) Employee Training

Training Structure (as of September 2019)

	Rank-specific training	Language skills training	Manufacturing skills training	Sector-specific specialist training	Skill development assistance
Managerial staff	New manager training	Language training		Industrial Chemical Medical Energy	Assistance s Incentives fc
General (i	New post training Management skills development training	(by invitation)		Agriculture & food Logistics Seawater Research	Assistance system Incentives for distance learning
General (i.e., not managerial) staff	Group leader training Grade-1 employee training	Group language training for young	Worksite supervisor training	•Administration Etc.	arning & qua
agerial)	Year 2 follow-up training New recruit training	employees Language training for new recruits	How to be a manufacturing worker	Specialist skills Task-related skills	& qualifications

Rank-Specific Training

Under this system, we instill the attitudes and mindsets needed to perform the roles and obligations of each specific grade. The training uses self-analysis and a variety of tasks to encourage employees to make discoveries for themselves and apply those in their work. Starting in fiscal 2019, new post training for those assigned to ranks on the cusp of promotion to managerial posts instills the basics of management, thus better enabling us to harness the potential of younger employees.

Language Training

This involves a variety of programs, including basic language training to seed new recruits and younger employees with the potential to become globally capable workers, as well as invitation-only language instruction for mid-career employees with a view to overseas postings. Moreover, "language training" is not just about foreign languages, but also teaches practical skills such as presentation, meeting strategies, and debating. Moving forward, we will continue to enhance the globalization of our workforce to prepare for the group's ongoing internationalization.

Manufacturing Skills Training

Worksite supervisor training is a groupwide initiative limited to employees in our manufacturing businesses. Based on solving actual problems from the factory, trainees receive guidance from instructors on how to implement improvements and identify and resolve issues, as well as on workplace leadership.

(2) Career Path Design System

Under this system, employees can set the career path they want to pursue. Following self-assessment in their current positions, participants declare the roles they would like to progress to next, regardless of whether or not it is in the same department or business segment.

Rewarding Workplace (Commitment to Employees)

Reducing Work-related Accidents

No company can thrive without a safe, secure work environment, and workplace safety is our overriding priority. To illustrate our commitment, we established a target for work-related accident reduction: to keep the number of accidents associated with days away from work per million work hours at 0.90 or less by fiscal 2021.

This figure was reached in light of the Ministry of Health, Labour and Welfare's work-related accident statistics, the size of the Air Water Group's workforce, and the nature of the businesses we are involved in.

Creating Safe and Secure Workplace Environments

Safety and Health Basic Policy

- 1. We aim to achieve zero work-related accidents, and advance comprehensive and systematic safety measures.
- 2. We promote the formation of a comfortable workplace environment, while securing employee safety and health.
- 3. We comply with all related laws and operating procedures, and create workplaces with clear lines of responsibility concerning occupational safety, traffic safety, and occupational health, as well as safety and disaster prevention.

Under the above Basic Policy, through providing safety and health education, we raise the awareness of each employee and promote the creation of a corporate culture that places the highest priority on safety and health.

Safety and Health Structure

At Air Water, we have established a Central Safety and Health Committee to secure workplace safety and health. The committee meets regularly under the supervision of the director of the Safety and Health Management Headquarters.

The Safety and Health Management HQ director selects the supervisory executives, and is responsible for governing safety and health groupwide, and for eliminating work-related accidents. The assistant director of the Safety and Health Management Headquarters appoints the general manager of the Compliance Center, and assists the director.

In addition, committee members responsible for safety management and health, and the heads of the various safety and health departments, form the Central Health and Safety Committee, and labor union representatives also participate to reflect the workforce's views in proceedings.

The central committee meetings minutes are disclosed internally to ensure broad dissemination of information.

Safety and Health Structure Chart



Work-related Accident Reduction Initiatives

In fiscal 2018, the group's priority focus was on preventing work-related accidents involving falls. Initiatives to reduce accidents included the following.

1. Training

- Technical safety training and safety staff training
- Training for staff in charge of safety at workplaces with high accident rates
- Risk assessment training
- · Safety awareness training for new recruits

2. Reducing Traffic Accidents

- Set and revise rules for vehicles and safe driving
- Traffic safety meetings and administrator seminars at companies with a high accident risk

3. Preventing Repeats of Similar Accidents

 Lateral sharing of work-related accident information via safety information bulletins

4. Safety Audits

- Safety and security audits
- · Special audits of workplaces where accidents occur
- Safety diagnoses of manufacturing workplaces by independent experts

Work-related Accident Statistics

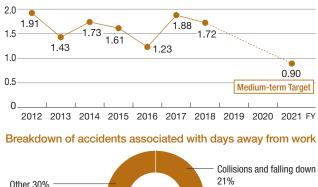
At the Air Water Group in fiscal 2018, there were 83 accidents associated with days away from work, roughly similar to the previous year (84). The frequency rate* of such accidents was 1.72, an improvement over the previous year (1.88).

*The number of people involved in accidents resulting in death	(Deaths and injuries resulting from work-related accidents	×1.000.000	
or injury per one million total working hours.	Frequency rate=	Total working hours	×1,000,000	/

FY2018 Analysis and Priority for FY2019

At Air Water, some 21 percent of work-related accidents associated with days away from work in fiscal 2018 involved falling. This was due to an increase in falling accidents in the transport business.

In fiscal 2019, we are working to identify tasks and locations prone to falling accidents, and are carrying out risk assessments to find ways to reduce those risks.





Traffic accidents 13% Caught or pinched in machinery 15%

Falls and stumbling 19%

*Categories based on those used in government industrial accident statistics

FY2018

83

Cuts and grazes 2%

Offering Safe and Secure Products and Services (Commitment to Customers)

Basic Approach to Customers

Air Water is working every day to offer products and services that meet its customers' high expectations and earn their trust.

We are making groupwide efforts toward further improvement of quality, focusing on safety and security.

Company-wide Policy on Quality and Company-wide Quality Targets

The Air Water Company-wide Policy on Quality is designed to encourage quality assurance and raise employees' awareness of the importance of quality. We have set company-wide targets as a means of improving quality levels, and are working to reduce quality risks.

Company-wide Policy on Quality

Offering products, goods, and services with quality appreciated by our customers with a word of thanks.

Company-wide Quality Target

Follow the Quality Compliance Guidelines and reduce quality risks in Air Water Group products.

Initiatives to Boost Quality Compliance

Quality Compliance Guidelines

The steady stream of cover-ups at famous Japanese companies regarding quality problems has made people sensitive to such issues. Any such wrongdoing, major complaints, and large-scale recalls may undermine society's trust in us and cause untold economic losses. To help avoid such disasters, we instituted the Air Water Group Quality Compliance Guidelines in 2018. The guidelines stipulate the basics of the group's activities toward reducing quality compliance risks, and set forth policies for departments and group companies to improve their risk management.

Meetings were held in Osaka, Tokyo, and Sapporo in January 2019 to explain the guidelines to quality assurance staff from various group companies, so that they could then relay the relevant information throughout the group.

Quality Risk Surveys

Since fiscal 2017, we have conducted internal surveys to identify the risk factors of the group's products, and to determine the nature of risks and the status of risk control within the group.

Quality Assurance Workshops

Workshops are an effective means of pursuing quality assurance activities groupwide.

For instance, in fiscal 2018, we held workshops in order to increase the number of in-house auditors who can respond to the 2015 version of ISO9001. Workshops were held in Osaka, Tokyo, and Sapporo to explain about the switch to the 2015 certification and new gualifications, and to instill understanding about the essential requirements of ISO 9001. A total of 107 employees attended.

Enhancing Supply Chain Management to Promote Fair Business Practices (Commitment to Suppliers)

Basic Approach to Suppliers

For the continued growth of its business, Air Water strives to comply with laws and observe agreements with customers, suppliers, and other parties, and to maintain and improve trust-based relationships with its stakeholders. We promote fair business practices and hope to grow together with our stakeholders.

Purchasing Approach

Air Water has established its purchasing approach in the Purchasing Management Regulations as follows.

- Air Water selects its suppliers based on a comprehensive evaluation rooted in economic rationality. Selection is made without regard to nationality, location, or size of business, and new entrants are always given a fair and impartial opportunity to participate.
- In conducting its purchasing activities, Air Water considers conservation of resources and environmental protection. In addition, the company ensures that related laws as well as its own regulations and circulars are fully understood and observed.

Fair Dealings

Compliance Training Seminars

Maintaining and developing good relations with suppliers based on fair dealings is not only the bedrock on which our business is founded, it is also key to enhancing compliance.

In fiscal 2018, we held compliance training seminars for newly appointed managers and newly hired employees, as well as the representatives and management supervisors of companies new to the Air Water Group. The seminars focused on compliance with relevant laws, including:

• The Act on Prohibition of Private

Monopolization and Maintenance



Compliance training

- The Act against Delay in Payment of Subcontract Proceeds, Etc. to Subcontractors
- The Construction Business Act.

of Fair Trade

Promoting Green Procurement

Some Air Water Group companies promote "green procurement" practices as a means of reducing their environmental footprint. These companies consider environmental factors of the goods and services which they procure in addition to quality, price, and delivery time and thus endeavor to purchase raw materials, chemical additives, fuels, packaging materials, product transport, and products from suppliers that work proactively to preserve the environment.

Principles in Selecting Goods

We adopt the following principles in order to select goods that have little environmental impact in all stages of manufacturing, use, and disposal.

- (1) Raw materials (4) Durability (2) Controlling use of hazardous substances, etc.
 - (5) Packaging materials
- (3) High reusability and
- recyclability
- (6) Energy-saving
- (7) Low environmental load in disposal

Pursuing Stable Return of Profits in Line with Performance and Building Trust (Commitment to Shareholders and Investors)

Basic Approach to Shareholders and Investors

We actively communicate with shareholders and investors to help deepen their understanding of Air Water's businesses and management strategies and also work to build trust on a stable, long-term basis by returning profits to shareholders in line with performance.

Communication with Shareholders and Investors

In order to make it easier for shareholders to have their say, we publish convocation notices regarding meetings quickly on our website, and allow online voting. We also issue shareholder reports twice a year to provide a clear representation of our business activities and performance.

For institutional investors and analysts, we hold quarterly conference calls and individual meetings, and organize briefings led by the president relating to the second and fourth quarter accounts. Moreover, we endeavor to strengthen direct communication with overseas investors through overseas roadshows and conferences, again with the participation of the president.

We also provide relevant information in a timely manner to individual investors through a variety of direct communication means, including informational events and our well-maintained website.

We will continue to communicate proactively, and to maintain and develop stable, long-term, trust-based relationships with our shareholders, investors, and analysts.

Institutional investor and analyst outreach in FY2018

- O Briefing for institutional investors and analysts: 2
- O Teleconferences for institutional investors and analysts: 3
- O Conferences hosted by securities firms: 4

 \odot Individual meetings with institutional investors and analysts: 158





Financial results briefing

Our shareholder report

Disclosure Policy

Air Water endeavors to ensure prompt information disclosure to its shareholders and investors based on the principles of transparency, fairness, and continuity. In disclosing information, we comply with the Rules on Timely Disclosure of Corporate Information by Issuers of Listed Securities of the Tokyo Stock Exchange (hereinafter, "Timely Disclosure Rules"). We also endeavor to proactively disclose information not subject to the Timely Disclosure Rules in a timely manner. Promoting Activities Closely Tied to and Rooted in Local Communities (Commitment to Local Communities)

Basic Approach to Community Relations

The Air Water Group has eight regional business companies throughout Japan, and over 260 group companies in various industries. These companies are closely tied to their local communities and pursue businesses rooted in those communities, while contributing to local development and deepening communication with local residents.

Well-Rounded Personal Development Classes for Elementary School Kids

At Air Water, we were proud to help hold a special science class at Kyoto University on February 11, 2019, where we sponsor the American football team.

The team's athletes hold a regular event for elementary school children, where sports and academic learning are used to promote well-rounded personal development, and we were brought in to conduct science experiments using liquid nitrogen. Two young staff from our research facilities were the "teachers" that day, and enthralled the kids with a demonstration of how liquid nitrogen is made from air.



Kids participate in experiments using liquid nitrogen

Emergency Drills and Information: Forging Stronger Bonds with the Community

As natural disasters become increasingly common, close coordination with local communities will be vital in emergency situations.

With that in mind, we are taking a variety of action. For instance, three Air Water Group companies held a joint seminar in March 2019 to teach people what to do with medical gas and in-home oxygen supply devices in emergencies. The seminar was attended by 83 medical professionals from local hospitals and clinics, whose well-justified unease about what to do in emergencies were addressed with real-world examples such as Hokkaido Air Water's reaction to the large-scale blackouts that followed the Hokkaido Eastern Iburi Earthquake of September 2018. In this instance, the company teamed up with relevant group subsidiaries to quickly inspect medical gas supplies and facilities, provided necessary support to at-home patients, checked on the wellbeing of some 4,300 people, and secured Hokkaido's oxygen reserves with product from Honshu.

On September 6, 2019, the anniversary of the aforementioned earthquake, we held drills at 11 Air Water sites in Hokkaido to reinforce proper action regarding LPG supplies in emergency situations. The drills assumed difficult circumstances—blackouts across



the whole of Hokkaido and malfunction of the devices that fill tank trucks with gas—and drilled participants on how to restore gas supplies using mobile power supply vehicles.

LPG supply restoration drills

Social

Message Head of Human Resources

Building Resilience to Today's Unrelenting Social Change through Fearless HR Management

Workforce Is Key to Our Commitment to the Community

NEXT-2020 Final, the Air Water Group's new mid-term business plan, provides six areas of reform as part of our basic policies. One of those is reform in social value creation, and as part of that, we are working to further clarify the materiality of ESG and KPIs. For the first year of the plan, we are focusing on boosting workforce diversity and opportunities for women to advance; this is an important facet of the "S" (social) in ESG, and one of three KPIs ("improved gender balance of management-level employees"). Elsewhere, we are working hard in another of the six areas of reform: reform of workforce development.

These activities are based on diversity and inclusion, and designed to boost the workforce diversity—one of the group's core strengths. Channeling the skills of our many individuals is not just a way to add to our collective strength, but is also a vital means of making a rewarding workplace for our people.

People and Data Drive a Balanced Policy

Our three-day training program for managers at Air Water and the regional business companies is gradually being expanded to incorporate the whole group. Our aim is to ascertain the individual skills and qualities of our employees by creating a databank of objective data obtained from the "human assessments" conducted as part of this training.

In the future, we intend to have a holistic training framework encompassing all ranks of all Air Water Group companies worldwide, and to conduct these "human assessments" so as to have a databank not only of the individual qualifications, experience, and achievements of our workforce, but also their personal qualities and skills. Such data is universal in nature, and will therefore allow us to manage our workforce on a groupwide basis without the restrictions that company boundaries throw up. We hope that, in addition to ensuring that the most suitable people are assigned to the most suitable positions, this system will fluidize our human resources in a way that makes it easier for individuals to pursue growth. It is essential that we provide talented employees, who have traditionally been shackled by managers who guard such resources jealously, broader opportunities, and that those employees take these chances to advance. A talented employee's departures for fertile fields in other areas of the group is not a loss; it is a churning of the local soil and a chance for budding employees to grow.

Our overall aim is to better harness the Air Water Group's human resources in a way that complements the data-driven side of management, and to better harness data in a way that complements the people-driven side of management. In doing so, we seek to maximize the value offered by one of the Air Water Group's foremost strengths: our diverse workforce.



Yasunori Kato Corporate Director and General Manager of Human Resources Air Water Inc.

Parlaying Innovative HR Policies into Greater Social Value

Another important facet of our HR policies today is hiring more women and non-Japanese people, and ensuring our working environments are as welcoming to them as to everyone else.

Improving the gender balance of company management is one of our KPIs, and we are determined to achieve large increases. First, we must increase the percentage of our female workforce. Our lifestyle-related business, in particular, can benefit from the approaches, perspectives, and ways of working unique to women employees, so we are working proactively to hire more women in this area. We hope that greater numbers of female employees in management positions will serve to motivate the women in our workforce and contribute to our efforts to attract and retain talent.

In addition, we have plans to further globalize our workforce, such as by expanding our hiring for overseas operations to include overseas students studying in Japan and Japanese studying abroad. Those who have qualifications and communication skills that hint at potential for high-level performance will receive commensurate compensation packages, and those who acquire these after joining our team will also be considered for placement in the international section of workforce and overseas postings.

In April 2020, we will launch our New Manager Development Program (name TBC), which seeks to place talented employees in management positions early on, regardless of gender or nationality. The program is intended to speed up the process of getting the right people into the right positions by simplifying the rules, which have traditionally been rigid in their requirement that every single step on the path to promotion must be observed.

Meanwhile, as game-changing technologies like 5G, the internet of things, and artificial intelligence become increasingly commonplace, change itself is becoming increasingly fast. At the Air Water Group, we believe that HR policies based on diversity and inclusion are key to ensuring we can stay abreast of those advancements and boosting our value to society as a whole.

Governance



The Air Water Group believes that conducting fair business activities, using general common sense, and gaining trust from all stakeholders is essential for continuous business growth and the maximizing of enterprise value. To this end, we believe that our most important management task is to make ceaseless efforts to establish comprehensive corporate governance by enhancing the internal control system, enforcing compliance, and reinforcing risk management.

- Enhancing Corporate Governance
- Enforcing Compliance
- Reinforcing Risk Management
- Information Security

Enhancing Corporate Governance

Compliance with Japan's Corporate Governance Code

Details regarding some of Air Water's activities in line with Japan's Corporate Governance Code—established by the Tokyo Stock Exchange, effective June 1, 2015—are reported in our Corporate Governance Report, which is available to the public on the company's official website.

X

Corporate Governance Report http://www.awi.co.jp/csr/governance/

Summary of Corporate Governance System

Air Water is a company with an Audit & Supervisory Board, where the Board of Directors is responsible for making important management decisions and supervising business execution, and auditing of the execution of director duties and other matters is accomplished through Audit & Supervisory Board members attending meetings of the Board of Directors and other important committees. This management framework ensures appropriate decision-making and prompt business execution by directors while enabling proper supervision and monitoring of each director's performance of duties.

		Gene	eral Shareholders' Meeting		
		Appointment and dismissal	Appointment ar	nd dismissal	Appointment and dismissal
lanagemen		tside directors)	Audit & Supervisory Board 5 (incl. 3 outside auditors) 16 meetings per year	Cooperation Accou	unting Auditors
		Supervision Cooperation	Operations auc	lit	Accounts audit
		•	4		•
	Submission and reporting		Appointment and dismissal		
	Corporate M	anagement Committee		Representative D	Pirector Reportin
Business	Reporting			Î Î	Supervision
execution		Submission and reporting		Reporting	and direction
	Operating C	ompanies, Business Divisions	, Administration Division, R	esearch Division, Gro	up Companies
		1			
Internal	Reporting Cooperation	Internal auditing			Auditing and eporting guidance

NB: Board meeting frequency based on FY2018 numbers.

Directors and the Board of Directors

In addition to matters stipulated in laws, regulations and the Articles of Association, Air Water's Board of Directors makes decisions and receives reports on important matters related to the Air Water Group's management and business execution and also supervises and monitors individual directors. Moreover, Air Water appoints two outside directors so as to receive recommendations and opinions that are beneficial to Air Water's management from an outside, objective perspective in order to further reinforce the Board of Director's management supervisory function. The term of office for directors is set at one year in order to make it possible to flexibly construct the optimal management framework in a rapidly changing business environment and to further clarify the management responsibilities of directors each fiscal year.

Gauging the Board's Efficacy

As part of Air Water's efforts to bolster the effectiveness of the Board of Directors as a whole, the board is subject to an annual analysis and assessment.

FY2018 Assessment Method

All members of the Board of Directors and the Audit & Supervisory Board answered a self-assessment questionnaire, and the responses were analyzed with input from external institutions to identify current conditions and weaknesses in the board's overall effectiveness.

Effectiveness Assessment Questionnaire: Main Areas Covered

- Make-up of the Board of Directors
- Operation of the Board of Directors
- Training
- Individuals' efforts relating to the board

FY2018 Assessment Results

The effectiveness assessment resulted in a mostly positive outcome, showing that the Air Water Board of Directors had the requisite size and diversity to engage in meaningful deliberations; that the number and contents of matters tabled for discussion at board meetings were appropriate; and that matters were fully deliberated upon, with members making statements and asking questions proactively. Thus, the board was, in general, deemed to be performing its corporate governance roles and responsibilities, and was therefore assessed to be sufficiently effective. Conversely, issues were raised, such as the need to secure more time to discuss matters, more easily understandable explanations and materials relating to matters tabled before the board, and other issues to improve function of the board.

Moving forward, we will use the outcomes of the effectiveness assessments as part of our ongoing efforts to improve the board's functions.

Corporate Management Committee

As the body that supports accurate and quick decision-making in the group's wide-ranging fields of business, the Corporate Management Committee is comprised of executive directors at the level of managing director and higher, the general managers of each business division, and other key managers. The Corporate Management Committee, which meets once a month, in principle, conducts advance deliberations on the agenda items of the Board of Directors from wide-ranging and diverse standpoints, and also deliberates on important items related to the Air Water Group's business execution.

Audit & Supervisory Board and A & SB Members

Air Water appoints three additional outside A & SB members so as to receive recommendations and opinions that are beneficial to Air Water's auditing from an outside, objective perspective in order to further reinforce monitoring and supervision of management.

A & SB members work to grasp and monitor management execution by such means as attending Board of Directors meetings and other key meetings in accordance with the auditing policies and standards, etc., stipulated by the Audit & Supervisory Board, and conduct auditing to ensure that the execution of duties by directors conforms with laws, regulations, and the Articles of Association and that corporate operations are being executed properly through supervision and verification of the design and operation, etc., of the internal control system, including internal controls related to financial reporting.

A & SB members receive regular reports from the accounting auditors and internal auditing unit on the status of audits and findings, and exchange information and opinions with them.

Internal Audits

Internal audits are conducted regularly by the Internal Auditing Office, the company's internal auditing unit, on the Air Water Group's compliance with laws, regulations, and internal rules and on the appropriateness and adequacy of the group's business processes. The Internal Auditing Office also conducts monitoring and supervision of the construction and operation of the internal control system for ensuring the reliability and appropriateness of financial reporting, and with respect to evaluations of the system's effectiveness, the Office fulfills the role of lead managing division under the responsibility and direction of the representative director.

In addition, along with the Internal Auditing Office, Air Water has established the Compliance Center as the dedicated department for cross-group management and governance in connection with compliance, disaster prevention, and environmental protection. When facts are found through internal audits that have the potential to seriously impact Air Water's management, there is a system for appropriately reporting them to the Audit & Supervisory Board and the representative director.

Accounting Auditors

With regard to accounting audits, Air Water has concluded an auditing agreement with KPMG AZSA LLC, and this firm carries out the audits.

Independent Officers

In order to ensure that the management supervisory function of the Board of Directors is highly effective, Air Water appoints independent outside directors and independent outside auditors with the capability and experience to contribute to the company's sustained growth and help increase its corporate value over the medium-to-long term.

Independence Judgment Criteria and Qualifications for Outside Officers

Air Water appoints as outside officers individuals who meet requirements and criteria stipulated in the Companies Act and by financial instrument exchanges and who meet the Judgment Criteria for the Independence of Outside Officers, which has been established by resolution of the Board of Directors. In addition, in selecting candidates for outside officer positions, the company puts emphasis on a high level of expertise and extensive experience that make possible honest and constructive recommendations and opinions with respect to the company's management.

Details of the Judgment Criteria for the Independence of Outside Officers are provided in our Corporate Governance Report.

Reasons for Appointment of Independent Officers

We chose these five people because they meet the company's Judgment Criteria for the Independence of Outside Officers, and we have judged that there is no reason to suspect the existence of "potential conflicts of interest with general shareholders" as stipulated by the Tokyo Stock Exchange.

Outside Director Yukiko Sakamoto

Board of Directors meeting attendance: 15/15

Yukiko Sakamoto has held key positions in the Ministry of Health, Labour, and Welfare; and has served as the deputy governor of Shizuoka Prefecture and as a member of the House of Councilors. She therefore has extensive experience and a high level of expertise. In light of her leveraging of that experience and expertise to provide beneficial advice regarding Air Water's overall management, we believe she is indeed an appropriate appointment.

Outside Director Isamu Shimizu

Board of Directors meeting attendance: 11/12

(board meetings held on and after his appointment on June 27, 2018)

Isamu Shimizu is a professor emeritus of Kyoto University and a long-standing researcher of ecology. He therefore has extensive experience and a high level of expertise. In light of the beneficial advice he provides regarding Air Water's overall management, we believe he is indeed an appropriate appointment.



Outside Auditor Kouichi Nakagawa

Board of Directors meeting attendance: 15/15

Audit & Supervisory Board meeting attendance: 16/16

Kouichi Nakagawa has had a long career in the financial industry, and therefore brings a wealth of experience and expertise. In light of the useful guidance and advice he provides regarding the appropriateness of Air Water's pursuit of business operations, we believe he fulfils the auditory functions required of an outside auditor, and is therefore an appropriate appointment.

Outside Auditor Akihiko Takashima

Board of Directors meeting attendance: 9/15

Audit & Supervisory Board meeting attendance: 8/16

Akihiko Takashima has had a long career in the steel industry (one of the main purchasers of industrial gas), and therefore brings a wealth of experience and expertise. In light of his leveraging of that experience and expertise to provide useful quidance and advice from an independent perspective regarding the appropriateness of Air Water's pursuit of business operations, we believe he fulfils the auditory functions required of an outside auditor, and is therefore an appropriate appointment.

Outside Auditor Atsushi Hayashi

Board of Directors meeting attendance: 14/15 Audit & Supervisory Board meeting attendance: 15/16

Atsushi Hayashi has a wealth of experience and expertise as a judge and attorney. In light of his leveraging of that experience and expertise to provide useful guidance and advice regarding the appropriateness of Air Water's pursuit of business operations, we believe he fulfils the auditory functions required of an outside auditor, and is therefore an appropriate appointment.

NB: Board meeting attendance based on FY2018 numbers.

Support for Outside Officers

The General Affairs Department, which provides admin functions for the Board of Directors, distributes to outside directors materials pertaining to board meeting agendas and reports well in advance of meetings, and explains them where required.

Information and materials about the company that outside auditors require (or that are otherwise deemed appropriate for sharing among auditors) are relayed to them mainly by the standing statutory auditors.

Officers' Remuneration

Directors are paid remuneration within a scale approved by a shareholders' meeting resolution, and adjusted in accordance with each individual's roles and responsibilities. Another consideration when deciding on remuneration is our belief that it is a powerful incentive for working to improve corporate value over the medium-to-long term. For remuneration to be approved, the representative directors deliberate on the matter before drawing up a remuneration table and receiving the input of the independent outside directors before tabling it for approval at a Board of Directors meeting. Similarly, auditors are paid remuneration within a scale approved by a shareholders' meeting resolution, and finalized after discussion and decision by the auditors.

Composition of Officers' Remuneration

Remuneration paid to directors (excluding outside directors) comprises three parts: a base fee, which is a fixed amount; bonuses, which are determined in accordance with the company's business performance; and stock options, which serve as an incentive to pursue progress in business performance and share price over the medium-to-long term. In addition, starting in fiscal 2019, we have instituted a remuneration system to ensure that directors shoulder a greater share of the benefits and risks of share price movement along with shareholders. The new system assigns shares with transfer restrictions to directors (excluding outside directors) as a means of motivating them to work hard to drive share prices upward and improve corporate value. The remuneration paid to outside directors and auditors comprises only the basic fee and bonuses.

Officers' Remuneration in FY2018

		Remunerat	Remuneration by type (million yen)			
Category	Total remuneration, etc. (million yen)	Basic fee	Bonuses	Stock options	No. of officers included	
Director*	1,041	785	176	79	19	
Auditor*	49	43	5	_	2	
Outside officer	60	55	4	_	6	

*Excl. outside officers

*Incl. 1 director or outside officer who resigned in FY2018

Enforcing Compliance

Compliance Structure Overview

In the organizational structure for compliance management, the Compliance Center has been set up as the supervising department under the direct control of the representative director, and is in charge of integrated management of compliance-related problems. The chief of the Compliance Center is appointed from among executive officers. Starting from January 2018, each company has a department responsible for compliance associated with organizational reform to expedite decision-making for ensuring thorough compliance. The responsible department of each company seeks to closely cooperate with the Compliance Center, thereby enhancing the compliance structure of the group companies.

Air Water Group Code of Ethical Conduct

The Air Water Group Code of Ethical Conduct provides all officers and employees of Air Water and its group companies with guidelines to help them act in strict conformance with the laws and regulations and behave in an ethical manner. In addition, we have a Compliance Handbook, which breaks down the code and provides examples of violations in an easy-to-understand manner. The handbook is distributed to all group employees with the aim of raising their awareness of the vital importance of ethical conduct and compliance.

Compliance Committee

Air Water has established the Compliance Committee as a consultative body in which relevant divisions get together and discuss compliance issues. The Committee considers specific measures concerning the policies and instructions on compliance given by the representative director, and other issues, and also discusses ways to deal with compliance violations if they occur.

Internal Reporting System

Air Water has established an internal reporting system in order to ensure compliance-based management. Anyone who becomes aware of violations of laws or internal rules, or any acts which may violate them, can make a report. Points of contact for reporting have been established both inside and outside the company, and there is a provision ensuring that a person who makes a report will not suffer any disadvantage.

The points of contact, or hotline, for this internal reporting system are communicated to all group employees by such means as the "compliance poster" displayed at all business sites.

See our website for more on our compliance-related activities.

Compliance at the Air Water Group

https://www.awi.co.jp/esg/governance/compliance.html

Reinforcing Risk Management

Risk Management Structure

The Compliance Center, which is under the direct control of the representative director, manages, as the supervisory division for the entire group, the risks recognized as particularly important for business activities of the Air Water Group; namely, the risks concerning compliance, safety, disaster prevention, environmental preservation, and quality assurance.

Individual risks concerning information security, intellectual property, expansion of overseas businesses, business contracts, etc., are managed through actions at the level of each responsible division such as by formulating internal regulations, preparing manuals, and providing education and training, as well as through prior inspection and authorization procedures.

With the Compliance Center serving as the secretariat, the risk management examination meeting is held regularly, helping to bolster the risk management framework of the entire group. Crisis Management Framework



See our website for more on our risk-management activities.

Risk management at the Air Water Group

https://www.awi.co.jp/esg/governance/risk_management.html

Information Security

Initiatives for Information Security

Air Water is fully aware that protecting the information of customers, etc., is an important social responsibility of any company. This means not only complying with laws and regulations related to specific personal information or personal information protection but also requiring all officers, employees, and other related parties engaged in corporate activities to ensure information security and protection of information in accordance with internal information security management regulations.

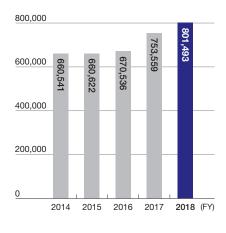
Major Information Security Measures

Category	Measures
Dissemination of rules	· Conducting training against targeted email attacks
Management of information devices	Encryption of information devices Periodic inventory counting using asset management tools
Illegal use prevention	 Password control and periodic changing of password Controlling entry into/departure from data center Banning connection of personal PC to company network, banning connection of personal media to company PC
Measures against external threats	Complete separation of external network and intranet using firewall Introduction of latest antivirus software Web filtering and blocking unsolicited emails Monitoring unauthorized communication with outside parties

Financial Highlights

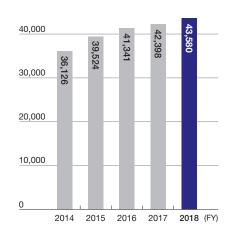
Net sales (million yen)

1,000,000

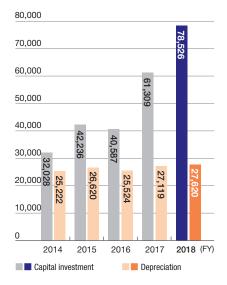


Operating income (million yen)

50,000



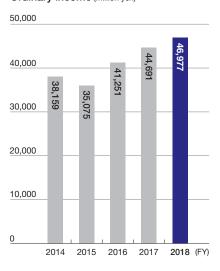
Capital investment & depreciation (million yen)



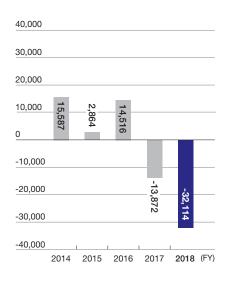
ROE & ROA (%)



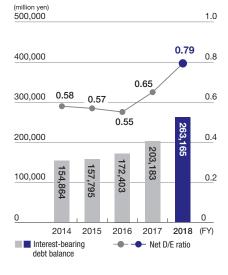
Ordinary income (million yen)



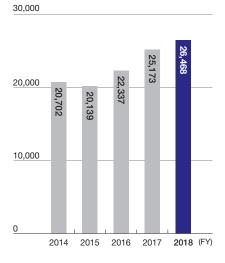
Free cash flow (million yen)



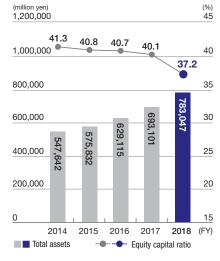
Interest-bearing debt balance (million yen) & net D/E ratio



Profit attributable to owners of parent (million yen)



Total assets (million yen) & equity capital ratio (%)

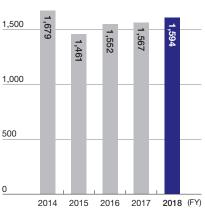


Non-Financial Highlights

Greenhouse gas emissions (thousand tons)

2,000





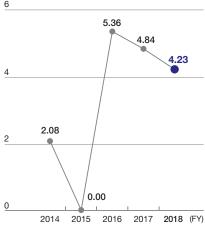
*Group companies (23) classified as Specified Business Operators under the Act on the Rational Use of Energy

No. of new recruits &

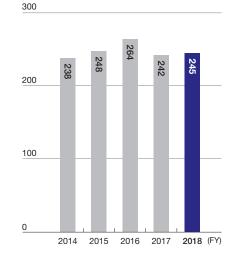
percentage of women among new recruits



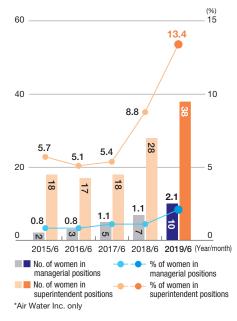
Turnover rate (%)



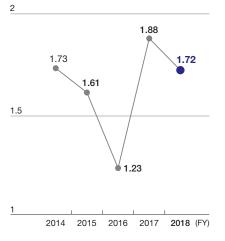
*Within 3 years of employment



Percentage of women among supervisor ranks

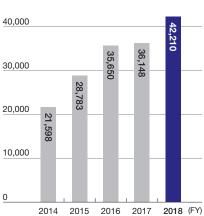


Frequency rate of work-related accidents associated with days away from work (%)



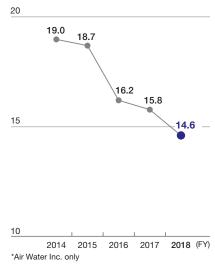
Industrial waste generated (tons)

50,000



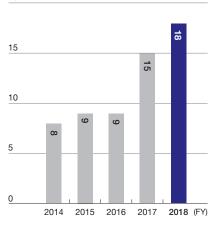
*Amount generated by group companies (10) deemed to be major generators of industrial waste in FY2018

Average years of service



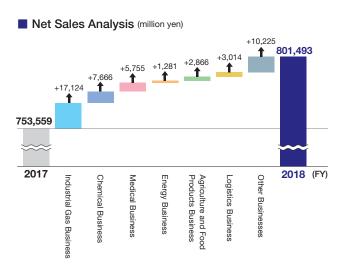
Incidents reported internally by whistleblowers

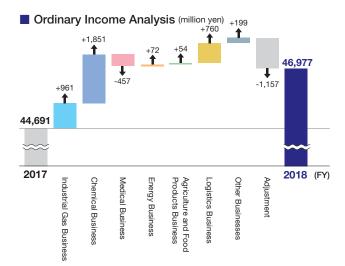


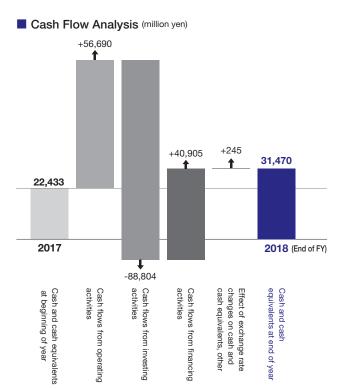


Financial Data (10-Year)

Fiscal year	2009	2010	2011	2012	2013	2014	
Net sales	426,357	471,809	492,679	540,016	641,256	660,541	
Operating income	28,202	31,268	31,672	27,897	35,078	36,126	
Ordinary income	29,020	32,958	33,601	35,155	36,281	38,159	
Profit attributable to owners of parent	13,916	11,680	17,167	18,365	19,225	20,702	
Capital investment	25,356	33,820	22,843	34,110	32,348	32,028	
Depreciation	17,044	19,423	20,373	22,058	24,337	25,222	
Cash flows from operating activities	44,592	32,576	39,661	30,057	48,248	51,071	
Cash flows from investing activities	(25,820)	(34,766)	(28,695)	(42,501)	(52,186)	(35,483)	
Cash flows from financing activities	(20,615)	(1,591)	(7,611)	10,253	4,620	(7,940)	
Free cash flow	18,772	(2,190)	10,966	(12,443)	(3,938)	15,587	
Fiscal year end							
Total assets	392,758	407,639	430,547	484,328	528,092	547,642	
Interest-bearing debt	114,787	122,317	119,385	141,295	155,479	154,864	
Equity capital	153,140	157,636	170,448	185,599	203,500	226,375	
Per-share data							
Earnings per share (EPS, yen)	73.64	61.24	89.35	94.04	98.32	105.75	
Net assets (BPS, yen)	789.89	822.05	873.78	949.63	1,040.22	1,155.80	
Dividend (DPS, yen)	22	22	22	24	26	28	
Major indicators							
Recurring margin (%)	6.8	7.0	6.8	6.5	5.7	5.8	
Return on asset (ROA, %)	7.5	8.2	8.0	7.7	7.2	7.1	
Return on equity (ROE, %)	9.7	7.5	10.5	10.3	9.9	9.6	
Equity capital ratio (%)	39.0	38.7	39.6	38.3	38.5	41.3	
Net D/E ratio	0.60	0.66	0.57	0.65	0.66	0.58	
Payout ratio (%)	29.9	35.9	24.6	25.5	26.4	26.5	
Non-financial information							
Consolidated number of employees as of fiscal year-end (persons)	7,925	8,237	8,062	8,937	9,557	10,147	
Number of consolidated subsidiaries	62	65	65	68	75	81	







en)

(Unit: million yen			
2018	2017	2016	2015
801,493	753,559	670,536	660,622
43,580	42,398	41,341	39,524
46,977	44,691	41,251	35,075
26,468	25,173	22,337	20,139
78,526	61,309	40,587	42,236
27,620	27,119	25,524	26,620
56,690	47,764	58,873	43,512
(88,804)	(61,637)	(44,357)	(40,647)
40,905	4,489	(8,553)	(8,115)
(32,114)	(13,872)	14,516	2,864
(02)111)	(10,012)	11,010	2,001
783,047	693,101	629,115	575,832
263,165	203,183	172,403	157,795
291,211	277,954	255,984	234,726
	Yen		
135.34	128.95	114.53	102.73
1,487.58	1,422.60	1,312.55	1,196.92
40	38	34	28
5.9	5.9	6.2	5.3
6.4	6.8	6.8	6.2
9.3	9.4	9.1	8.7
37.2	40.1	40.7	40.8
0.79	0.65	0.55	0.57
29.6	29.5	29.7	27.3
15,757	14,265	12,580	11,334
130	111	101	85

Financial Information

Consolidated Balance Sheet

		(Million y
	As of March 31, 2018	As of March 31, 2019
Assets	Walch 31, 2010	Widi Ci 1 0 1, 2013
Current assets		
Cash and deposits	23,298	32,621
Notes and accounts receivable - trade	185,216	194,938
Merchandise and finished goods	28,896	33,740
Work in process	8,442	9,238
Raw materials and supplies	15,902	17,167
Short-term loans receivable	10,736	5,269
Other current assets	12,280	14,689
Allowance for doubtful accounts	(1,781)	(2,343)
Total current assets	282,991	305,323
Noncurrent assets	202,001	000,020
Property, plant and equipment		
Buildings and structures (net)	61,089	76,760
Machinery, equipment and vehicles (net)	78,528	86,876
Land	74,735	84,173
Lease assets (net)	20,444	22,765
Construction in progress	33,847	52,134
Other property, plant and equipment (net)		6,879
Total property, plant and equipment	274,277	329,590
Intangible assets		
Goodwill	17,408	24,353
Other intangible assets	14,185	14,980
Total intangible assets	31,594	39,334
Investments and other assets		
Investment securities	79,270	77,349
Long-term loans receivable	2,805	8,133
Net defined benefit assets	7,444	4,407
Deferred tax assets	5,260	5,926
Deferred tax assets for land revaluation	65	85
Other investments and other assets	10,969	15,942
Allowance for doubtful accounts	(1,578)	(3,045)
Total investments and other assets	104,236	108,798
Total noncurrent assets	410,109	477,723
Total assets	693,101	783,047

		(Million yen)
	As of March 31, 2018	As of March 31, 2019
Liabilities		
Current liabilities		
Notes and accounts payable - trade	114,429	127,670
Short-term loans payable	32,836	54,906
Current portion of long-term loans payable	20,530	17,498
Current portion of bonds	_	250
Lease obligations	2,676	2,968
Accrued expenses	18,463	16,855
Income taxes payable	8,009	8,000
Provision for directors' bonuses	334	361
Other provisions	1,067	1,167
Other current liabilities	24,856	32,836
Total current liabilities	223,205	262,516
Noncurrent liabilities		
Bonds payable	20,000	30,250
Long-term debt	108,030	136,013
Lease obligations	19,108	21,277
Deferred tax liabilities	10,635	7,151
Deferred tax liabilities for land revaluation	902	921
Provision for directors' retirement benefits	927	1,214
Other provisions	823	370
Net defined benefit liabilities	8,664	9,153
Other noncurrent liabilities	6,157	5,480
Total noncurrent liabilities	175,251	211,832
Total liabilities	398,456	474,348
Net assets	000,400	474,040
Shareholders' equity		
	32,263	32,263
Capital stock		
Capital surplus Retained earnings	37,060	36,651
	209,570	228,015
Treasury stock Total shareholders' equity	(4,089)	(3,463)
	274,805	293,466
Accumulated other comprehensive income Valuation difference on available-for-sale	10.550	0.004
securities	10,558	6,831
Deferred gains or losses on hedges	(545)	368
Revaluation reserve for land	(8,503)	(8,503)
Foreign currency translation adjustments Accumulated remeasurements of defined	442	201
benefit plans, net of tax Total accumulated other comprehensive	1,190	(1,153)
income	3,148	(2,255)
Subscription rights to shares	379	423
Non-controlling interests	16,311	17,063
Total net assets	294,644	308,698
Total liabilities and net assets	693,101	783,047

Consolidated Statements of Income

	Year ended March 31, 2018	Year ended March 31, 2019
Net sales	753,559	801,493
Cost of sales	592,616	631,232
Gross profit	160,943	170,261
Selling, general and administrative expenses	118,545	126,681
Operating income	42,398	43,580
Non-operating income		
Interest income	157	184
Dividend income	873	1,019
Share of profit of entities accounted for using equity method	676	1,307
Rent income on facilities	888	944
Other non-operating income	2,691	3,167
Total non-operating income	5,287	6,624
Non-operating expenses		
Interest expenses	1,181	1,438
Rent expenses on facilities	774	940
Other non-operating expenses	1,038	848
Total non-operating expenses	2,994	3,227
Ordinary income	44,691	46,977
Extraordinary income		
Gain on sales of noncurrent assets	294	201
Gain on sales of investment securities	1,180	477
Gain on bargain purchase	1,017	-
Other extraordinary income	67	154
Total extraordinary income	2,559	833
Extraordinary losses		
Loss on sales and retirement of noncurrent assets	2,136	2,947
Loss on liquidation of business	_	2,816
Other extraordinary losses	4,612	2,208
Total extraordinary losses	6,748	7,972
Income before income taxes and minority interests	40,501	39,838
Corporate, inhabitant, and enterprise taxes	13,250	13,708
Deferred income taxes	263	(1,940)
Total income taxes	13,513	11,768
Net income	26,988	28,070
Net income attributable to non-controlling interests	1,815	1,601
Net income attributable to shareholders of the parent	25,173	26,468

Consolidated Statements of Comprehensive Income

Consolidated Statements of Comprehensive Income)	(Million yer
	Year ended March 31, 2018	Year ended March 31, 2019
Net income	26,988	28,070
Other comprehensive income		
Valuation difference on available-for-sale securities	1,358	(3,593)
Deferred gains or losses on hedges	(478)	1,515
Foreign currency translation adjustments	45	(286)
Remeasurements of defined benefit plans, net of tax	(292)	(2,442)
Share of other comprehensive income of associates accounted for using equity method	90	(192)
Total other comprehensive income	722	(4,999)
Comprehensive income	27,711	23,070
Comprehensive income attributable to:		
Shareholders of the parent	25,683	21,048
Non-controlling interests	2,027	2,022

Financial Information

Consolidated Statements of Changes in Net Assets

			Yea	ır ende	d Marcl	n 31, 20	018					Yea	r ende	d Marcl	h 31, 20	019		
				Share	nolders' e	equity				Shareholders' equity								
	Capi stoc		Capital surplus	;	Retained earnings		reasury stock		areholders' juity	Capi stoo		Capital surplus		Retained earnings		reasury stock	Total sha	areholder quity
Balance at beginning of term	32,2	63	33,70	5	192,021		(4,645)	25	3,345	32,2	263	37,06	0	209,570		(4,089)	27	4,805
Changes in items during the period																		
Change in treasury shares of parent arising from transactions with non-controlling shareholders			3,36	4				:	3,364			(481	I)					(481)
Dividends from surplus					(7,260)			(7	7,260)					(7,852)			(7	7,852)
Reversal of revaluation reserve for land					(0)				(0)					(0)				(0)
Net income attributable to shareholders of the parent					25,173			2	5,173					26,468			2	6,468
Change in scope of consolidation					(181)				(181)			6	8	(138)				(69)
Decrease by merger					(83)				(83)					(27)				(27)
Change of scope of equity method					(98)				(98)					(5)				(5)
Purchase of treasury stock							(8)		(8)							(4)		(4)
Disposal of treasury stock			(9))			564		554				3			630		633
Net changes in items other than shareholders' equity																		
Total changes in items during the period		-	3,35	4	17,549		556	2	1,460		-	(409	9)	18,445		625	1	8,661
Balance at end of term	32,2	63	37,06	0	209,570		(4,089)	27	4,805	32,2	263	36,65	1	228,015		(3,463)	29	3,466
	Valuation difference on available- for-sale securities	Deferred gains or losses on hedges	Revaluation reserve for land	Foreign currency translation adjustments	Accumulated remeasurements of defined benefit plans, net of tax	Total accumulated other comprehensive income	Subscription rights to shares	Non-controlling interests	Total net assets	Valuation difference on available- for-sale securities	Deferred gains or losses on hedges	Revaluation reserve for land	Foreign currency translation adjustments	Accumulated remeasurements of defined benefit plans, net of tax	Total accumulated other comprehensive income	Subscription rights to shares	Non-controlling interests	Total net assets
Balance at beginning of term	9,352	(72)	(8,503)	403	1,459	2,638	381	24,385	280,750	10,558	(545)	(8,503)	442	1,196	3,148	379	16,311	294,64
Changes in items during the period																		
Change in treasury shares of parent arising from transactions with non-controlling shareholders									3,364									(48
Dividends from surplus									(7,260)									(7,85
Reversal of revaluation reserve for land									(0)									(
																		26,46
Net income attributable to shareholders of the parent									25,173									
Net income attributable to shareholders of the parent Change in scope of									25,173 (181)									(6
Net income attributable to																		(6)
Net income attributable to shareholders of the parent Change in scope of consolidation									(181)									
Net income attributable to shareholders of the parent Change in scope of consolidation Decrease by merger Change of scope of equity method									(181) (83)									(2
Net income attributable to shareholders of the parent Change in scope of consolidation Decrease by merger Change of scope of equity method Purchase of treasury stock									(181) (83) (98)									(2
Net income attributable to shareholders of the parent Change in scope of consolidation Decrease by merger Change of scope of equity	1,206	(472)	0	39	(263)	510	(1)	(8,074)	(181) (83) (98) (8)	(3,727)	913	0	(241)	(2,349)	(5,404)	43	752	(2
Net income attributable to shareholders of the parent Change in scope of consolidation Decrease by merger Change of scope of equity method Change of treasury stock Disposal of treasury stock Net changes in items other	1,206	(472) (472)	0	39	(263)	510	(1)	(8,074) (8,074)	(181) (83) (98) (8) 5554	(3,727)	913	0	(241)	(2,349)	(5,404)	43	752	(2 ((63

Consolidated Statements of Cash Flows

	Year ended March 31, 2018	Year endeo March 31, 2019
Cash flows from operating activities		
Income before income taxes and minority interests	40,501	39,83
Depreciation	27,119	27,62
Amortization of goodwill	2,544	2,67
Gain on bargain purchase	(1,017)	- -
Increase (decrease) in allowance for doubtful accounts	716	1,91
Increase (decrease) in net defined benefit liability	183	(631
Interest and dividend income	(1,031)	(1,204
Interest expenses	1,181	1,43
Share of (profits) loss of entities accounted for using equity method	(676)	(1,307
Loss (gain) on sales and retirement of noncurrent assets	1,842	2,74
Loss on liquidation of business		2,81
Decrease (increase) in notes and accounts receivable	(25,096)	(3,559
Decrease (increase) in inventories	(3,076)	(4,000
Increase (decrease) in notes and accounts payable	17,435	7,31
Other cash flows from operating activities		
	(31)	(4,517
Subtotal Interest and dividends received	60,594	71,13
	1,401	1,59
Interest expenses paid	(1,179)	(1,409
Income taxes paid	(13,051)	(14,636
Net cash provided by (used in) operating activities	47,764	56,69
Cash flows from investing activities		
Purchase of property, plant, and equipment	(53,507)	(69,235
Proceeds from sale of property, plant, and equipment	4,378	1,31
Purchase of intangible assets	(5,401)	(2,305
Purchase of investment securities	(4,888)	(7,716
Proceeds from sale of investment securities	2,207	1,27
Purchase of investments in subsidiaries resulting in change in scope of consolidation	(3,410)	(8,403
Payments for investments in capital	(1,418)	(2,067
Payments for transfer of business	_	(2,016
Payments of loans receivable	(10,492)	(22,314
Collection of loans receivable	10,967	22,37
Other cash flows from investing activities	(71)	27
Net cash provided by (used in) investing activities	(61,637)	(88,804
Cash flows from financing activities		
Net increase (decrease) in short-term loans payable	3,758	19,73
Proceeds from long-term debt	32,893	43,96
Repayment of long-term debt	(26,667)	(22,369
Proceeds from issuance of bonds	10,000	10,00
Additional purchase of investments in subsidiaries	(6,897)	(1,989
Proceeds from sale-leaseback transactions	4,334	2,43
Repayments of lease obligations	(5,354)	(2,971
Purchase of treasury stock	(8)	(4
Proceeds from sale of treasury stock	564	63
Cash dividends paid	(7,272)	(7,868
Cash dividends paid to non-controlling interests	(861)	(653
Net cash provided by (used in) financing activities	4,489	40,90
Effect of exchange rate changes on cash and cash equivalents	(104)	(266
Net increase (decrease) in cash and cash equivalents	(9,487)	8,52
Cash and cash equivalents at beginning of year	(9,487) 30,412	22,43
ncrease in cash and cash equivalents resulting from merger	72	8
ncrease in cash and cash equivalents from newly consolidated subsidiary	1,436	43

Major Group Companies (as of October 1, 2019)

Name	Address	Business Activities	Air Water's share of voting rights (%)
Regional Business Comp	anies		
Hokkaido Air Water Inc.	Sapporo, Hokkaido	Sale of industrial gas and medical gas, LP gas and kerosene, natural gas, and related equipment	100.0
Tohoku Air Water Inc.	Sendai, Miyagi Prefecture	Sale of industrial gas and medical gas, LP gas and kerosene, natural gas, and related equipment	100.0
Kanto Air Water Inc.	Minato-ku, Tokyo	Sale of industrial gas and medical gas, LP gas and kerosene, natural gas, and related equipment	100.0
Koshinetsu Air Water Inc.	Matsumoto, Nagano Prefecture	Sale of industrial gas and medical gas, and related equipment	100.0
Chubu Air Water Inc.	Nagoya, Aichi Prefecture	Sale of industrial gas and medical gas, LP gas and kerosene, and related equipment	100.0
Kinki Air Water Inc.	Osaka, Osaka Prefecture	Sale of industrial gas and medical gas, LP gas and kerosene, natural gas and related equipment	100.0
Chushikoku Air Water Inc.	Hiroshima, Hiroshima Prefecture	Sale of industrial gas and medical gas, and related equipment	100.0
Kyushu Air Water Inc.	Fukuoka, Fukuoka Prefecture	Sale of industrial gas and medical gas, and related equipment	100.0

Industrial Gas Business

NSCC Air Water Inc.	Chuo-ku, Tokyo	Manufacture and sale of industrial gas (including onsite supply)	65.0
Air Water Carbonic Inc.	Minato-ku, Tokyo	Manufacture and sale of liquid nitrogen gas and dry ice	100.0
Air Water Hydrogen Corp.	Minato-ku, Tokyo	Manufacture, sale, recycling, etc., of industrial hydrogen gas	95.0
Nihon Dennetsu Co., Ltd.	Azumino, Nagano Prefecture	Manufacture and sale of electric heating devices and controllers for industrial applications	100.0
Shinko Air Water Gas, Ltd.	Osaka, Osaka Prefecture	Sale of industrial gas	60.0
Air Water Plant & Engineering Inc.	Sakai, Osaka Prefecture	Design, production, sale and maintenance of various types of gas generation units and gas applications, and LNG-related equipment	100.0

Chemical Business

	Kawasaki Kasei Chemicals Ltd.	Kawasaki, Kanagawa Prefecture	Manufacture and sale of organic acid products, organic acid derivatives, and quinone-based products	100.0
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Medical Business

Ikiken Co., Ltd.	Sayama, Saitama Prefecture	Manufacture and maintenance of medical oxygen concentrators	100.0
Air Water Medi H, Co., Ltd.	Shinagawa-ku, Tokyo	Contract sterilization of medical equipment and materials, and SPD solutions and services for medical institutions	100.0
Air Water Link Inc.*	Kyoto, Kyoto Prefecture	Sale and maintenance of cardiovascular devices, dialysis devices, and surgical equipment	97.2
Kawamoto Corporation	Osaka, Osaka Prefecture	Manufacture and sale of sanitary materials, medical supplies, etc.	50.1
Air Water Safety Service Inc.	Kobe, Hyogo Prefecture	Installation of medical gas pipes, and design, manufacture and sale of ventilators, fire extinguishing units, etc.	100.0
Ci Medical Co., Ltd.	Hakusan, Ishikawa Prefecture	Online sale and wholesale of dental and medical supplies	40.0
Globalwide International Pte. Ltd. Globalwide M&E Pte. Ltd.	Singapore	Design and installation of hospital equipment	55.0

*Name changed to Air Water Link on May 1, 2019, when Nishimura Kikai absorbed Handa as part of a merger.

Agriculture and Food Products Business

Saveur SS Inc.	Sapporo, Hokkaido	Manufacture and sale of processed meat products (ham and delicatessen), ingredient-type frozen foods, cooking sauces and confectionery	90.9
Tomiichi Co., Ltd.	Asahikawa, Hokkaido	Wholesale and processing of fruit and vegetables for processing, and sale of frozen foods, etc.	90.0
Gold Pak Co., Ltd.	Shinagawa-ku, Tokyo	Manufacture and sale of fruit and vegetable juices and other beverages including some soft drinks	100.0
Kyusyuya Co., Ltd.	Hachioji, Tokyo	Operation of fruit and vegetable retailing stores in department stores, station buildings and shopping centers, and operation of supermarkets	55.0
Sagami Ham Co., Ltd.	Yokohama, Kanagawa Prefecture	Sale of processed meat products and meat and prepared dishes	100.0
Plecia Co., Ltd.	Atsugi, Kanagawa Prefecture	Manufacture and sale of Japanese confectionery and Western confectionery	100.0
Daisen Ham Co., Ltd. *	Yonago, Tottori Prefecture	Manufacture of ham, bacon, sausage and other processed foods	100.0

Logistics Business

Air Water Logistics Co., Ltd.	Sapporo, Hokkaido	Distribution of high-pressure gas, general freight, food, medical and environmental items, and distributive processing services	100.0
Hokkaido Shatai Co., Ltd.	Kitahiroshima, Hokkaido	Design, manufacture, sale, and repair of truck bodies; vehicle inspection and certification	82.6
East Japan Air Water Logistics Co., Ltd.	Yokohama, Kanagawa Prefecture	Distribution of high-pressure gas, general freight, food, medical and environmental items, and distributive processing services	100.0
West Japan Air Water Logistics Co., Ltd.	Osaka, Osaka Prefecture	Distribution of high-pressure gas, general freight, food, medical and environmental items, and distributive processing services	100.0

Seawater Business

Nihonkaisui Co., Ltd.	Chiyoda-ku, Tokyo	Production and sale of salt and salt byproducts; environmental business, electric power business	75.6
Tateho Chemical Industries Co., Ltd.	Chiyoda-ku, Tokyo	Production and sale of magnesium oxide, fused magnesia, magnesium hydroxide, and ceramic products	100.0
Aquaintec Corporation	Kakegawa, Shizuoka Prefecture	Pipe renewal business, manufacturing of water treatment machinery, and sale of environmental equipment and materials	100.0

Other Businesses

Air Water Sol Inc.	Chiyoda-ku, Tokyo	OEM supply of aerosol products, and manufacture and sales of its own branded products	100.0
Air Water Materials Inc.	Minato-ku, Tokyo	Sale and export/import of semiconductor manufacturing chemicals, chemical industry chemicals, synthetics resins, and electric and electronic materials	100.0
K&O Energy Group Inc.	Mobara, Chiba Prefecture	Business management of subsidiaries which are engaged in the gas business, iodine business, etc.	16.9
Air Water Mach Inc.	Matsumoto, Nagano Prefecture	Manufacture and sale of industrial rubber products and resin products	100.0
Power Partners Pte. Ltd.	Singapore	Engineering and maintenance of uninterruptible power supplies	60.0

Corporate Profile / Stock Information

Corporate Information		(As of March 31, 2019	
Company name	AIR WATER INC.		
Head Office	12-8, Minami-Semba 2-chome 542-0081, Japan	e, Chuo-ku, Osaka,	
	Tel: (+81) 6-6252-5411 Fax: (+8	81) 6-6252-3965	
Registered Address of Head Office	2, Kita-Sanjo-Nishi 1-chome, C 060-0003, Japan*	Chuo-ku, Sapporo,	
Tokyo Office	18-19, Toranomon 3-chome, N 105-0001, Japan	/linato-ku, Tokyo,	
Established	September 24, 1929		
Paid-in Capital	¥32,263 million		
Number of Employees	15,757 (consolidated)		
URL	https://www.awi.co.jp/		

*Changed address to that of the head office on June 26, 2019

(2-12-8 Minamisemba, Chuo-ku, Osaka).

Principal Shareholders	(A	(As of March 31, 2019)		
Company	Number of shares held (thousands)	Ratio of shares held (%)		
The Master Trust Bank of Japan, Ltd. (trust account)	11,549	5.88		
Nippon Steel & Sumitomo Metal Corporation	n* 10,000	5.09		
Japan Trustee Services Bank, Ltd. (trust acc	count) 9,203	4.69		
Sumitomo Mitsui Trust Bank, Limited	7,936	4.04		
Sumitomo Mitsui Banking Corporation	6,196	3.16		
Air Water Customers' Stockholding	5,463	2.78		
GOLDMAN, SACHS & CO. REG	5,433	2.77		
The Hokkaido Bank, Ltd.	4,113	2.10		
North Pacific Bank, Ltd.	3,874	1.97		
Osaka Gas Liquid Co., Ltd.	3,787	1.93		

*Trade name changed to Nippon Steel Corporation on April 1, 2019

Information on Shares

Fiscal Year	From April 1 to March 31
Annual General Meeting of Shareholders	Held in June every year
Record Dates	Annual meeting of shareholders: March 31
	Year-end dividend: March 31
	Interim dividend: September 30
Total Number of Issued Shares	198,705,057 shares
Number of Shares per Unit	100 shares
Manager of the Register of Shareholders	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
Method of Public Notice	Electronic public notice [URL of Air Water Inc. on which public notice will be posted] http://www.awi.co.jp/ir/koukoku.html
Listed Financial Instruments Exchange	Tokyo, Sapporo
Securities Code	4088

Board of Directors		(As of June 26, 2019)	
Honorary Chairman	Masahiro Toyoda	Chairman of the Board	
Representative Chairman of the Board	Kikuo Toyoda	Chief Executive Officer	
Vice Chairman	Yasuo Imai	Assistant Chairman	
President	Kiyoshi Shirai	Chief Operating Officer	
Representative Vice President	Masato Machida	Corporate Management Officer	
Vice President	Yuu Karato	Chief Representative for Hokkaido Operations	
Vice President	Masahiro Kanazawa	President, Seawater Company	
Senior Managing Director	Hideo Tsutsumi	Global Business Officer	
Senior Managing Director	Yoshio Shiomi	President, Industrial Company	
Managing Director	Yasushi Sogabe	Corporate Strategy Office	
Managing Director	Hirokazu Kawata	President, Logistics Company	
Managing Director	Katsumi Kajiwara	President, Life Solution & Energy Company	
Managing Director	Atsushi linaga	IT Promotion Officer President, Air Water Softech Inc.	
Managing Director	Kosuke Komura	President, Medical Company	
Corporate Director	Akihiro Toyonaga	General Manager, Accounting	
Corporate Director	Ryosuke Matsubayashi	President, Air Water America Inc.	
Corporate Director	Yasunori Kato	General Manager, Human Resources	
Corporate Director	Koji Tanaka	General Manager, Engineering Integration Department & Japanese Operations Planning Department	
Corporate Director	Yukiko Sakamoto	Independent Director	
Corporate Director	Isamu Shimizu	Independent Director	
Standing Statutory Auditor	Hirohisa Hiramatsu		
Standing Statutory Auditor	Kouichi Nakagawa		
Standing Statutory Auditor	Hiromi Yanagisawa		
Auditor	Akihiko Takashima	Outside Corporate Auditor (Part-time)	
Auditor	Atsushi Hayashi	Outside Corporate Auditor (Part-time)	

AIR WATER	REPORT	2019	66
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