

Slogan

# Creation of a more comfortable space on the Earth is what Iwatani wishes and strives for.

## Corporate Philosophy

Become a person needed by society,  
as those needed by society  
can prosper

Our corporate philosophy—Become a person needed by society, as those needed by society can prosper—expresses the business philosophy of our founder Naoji Iwatani. Inspired as an agricultural school student by Charles Darwin's ideas, he founded his philosophy based on the principle that only companies capable of evolving and adapting to the world around them can survive in the marketplace.

After revolutionizing home fuel sources and dramatically reducing the amount of work required of homemakers in the kitchen, our core LPG business today is popular among both consumers and industry as a clean energy source that can be relied on even in emergencies. Industrial gases, another core business, is a vital social infrastructure essential to industrial development, used in the manufacture of nearly all of the products we see around us. Hydrogen, for which our founder worked to develop a market from scratch since 1941, today is fast taking root in society beyond industrial applications as the ultimate energy source for a decarbonized society.

Countless social challenges remain to be solved, including environmental issues such as global warming. Iwatani continues striving to achieve a sustainable, cyclical, and decarbonized society by constantly creating and providing the innovations and solutions needed by society.



# Contents

## Introduction

- P.01 Corporate Philosophy
- P.02 Contents
- P.03 To Our Stakeholders
- P.04 Iwatani's History
- P.05 Message from the President

## Value Creation Process

- P.10 Value Creation Process
- P.11 Value Creation Capital
- P.12 Key Issues for Realizing the Long-Term Vision (Materiality)

## Medium-Term Management Plan

- P.15 Medium-Term Management Plan: PLAN27 (2023 to 2027)
- P.16 Capital Policies and Returns to Shareholders
- P.18 Hydrogen Strategies
- P.23 Carbon-Free Strategies
- P.25 Domestic Energy & Service Strategies
- P.27 Overseas Strategies

## ESG

- P.30 Climate Change Response
- P.33 Promoting Environmental Management
- P.34 Human Resource Strategy
- P.37 Supply Chain Management and Human Rights
- P.38 Health and Productivity Management and Occupational Health and Safety
- P.39 Technology Strategy
- P.42 Safety and Security Initiatives
- P.43 Social Contribution Activities
- P.45 Corporate Governance
- P.47 Messages from Outside Member of the Board
- P.48 Executive Officers
- P.52 IR Activities

## Business Segment Strategies

- P.54 Three Business Fields
- P.56 Integrated Energy Business
- P.60 Industrial Gases & Machinery Business
- P.64 Materials Business

## Data

- P.69 ESG Data
- P.71 Financial Highlights
- P.72 Company Data

### Editorial Policy

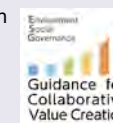
Since FY2022, this Integrated Report has sought to promote understanding among an ever broader range of stakeholders. The report provides an overview of the Iwatani Group and its medium- to long-term business strategies from both financial and non-financial perspectives. It also presents our plans for medium- to long-term growth, addressing major initiatives and business strategies intended to create social value and strengthen corporate value. We will continue to enhance the Integrated Report and the information it provides to more clearly explain the Iwatani Group's efforts to strengthen corporate value over the medium to long term.

**Period Covered** Most of the information provided in this Report concerns the period from April 1, 2023 through March 31, 2024, the Group fiscal year. Some information also refers to events before and after this period.

**Published** September 2024

**Guidelines** ● International Integrated Reporting Council (IIRC), International Integrated Reporting Framework

**Referenced** ● Ministry of Economy, Trade and Industry of Japan, Guidance for Integrated Corporate Disclosure and Company-Investor Dialogues for Collaborative Value Creation



### Forward-Looking Statements (Business and Other Risks)

Forecasts of business performance and other forward-looking statements found in this Report involve risks and uncertainty. Please note that actual results may differ for various reasons from the forward-looking statements presented herein.

# To Our Stakeholders



Chairman and CEO

President

*Akiji Makino Hiroaki Majima*

## Contributing to Society as a Trusted Company by Creating New Value

Since our founding in 1930, Iwatani Corporation has provided a wide range of products and services for both daily life and industrial applications, including energy, industrial gases, and materials, based on our corporate philosophy: Become a person needed by society, as those needed by society can prosper. These efforts are grounded in our desire to contribute to society by creating new value society will need in the future. This is the major driving force underlying the progress of our businesses.

Since 1941, when we identified hydrogen as the ultimate clean energy source, we have pushed for progress toward widespread use of hydrogen energy. Under the corporate slogan adopted in 1970 on the 40th anniversary of our founding—Creation of a more comfortable space on the Earth is what Iwatani wishes and strives for—we strive to deliver solutions to the social issues posed by environmental issues, as well as help achieve the Sustainable Development Goals (SDGs), through contributing to create a carbon-free society based on hydrogen.

As a co-representative of the Japan Hydrogen Association established in December 2020 and as a key member of the Hydrogen Council established chiefly by global energy firms, we are acting to promote use of hydrogen around the world with the aim of moving toward a hydrogen energy-based society.

To stimulate new hydrogen demand, we are developing hydrogen-refueling stations in Japan and in the United States in response to the spread of fuel cell vehicles (FCVs). We will focus on developing hydrogen-refueling stations for fuel cell commercial vehicles, including trucks and buses, as well as reducing operating costs by promoting self-service refueling.

We are securing new hydrogen demand by meeting customer needs to reduce carbon emissions through means including factory decarbonization and hydrogen supply as a fuel to enable real-world

means of transportation and mobility, whether by train, marine craft, or other, at large scale.

Our efforts to secure CO<sub>2</sub>-free hydrogen sources include studying the commercialization of green liquid hydrogen production alongside our partners, including a power utility and a mining company in Australia. The Liquefied Hydrogen Supply Chain Commercialization Demonstration Project, in which we participate, has been selected by the New Energy and Industrial Technology Development Organization (NEDO) for funding from the Green Innovation Fund. The project will include feasibility studies on developing global liquid hydrogen supply chains integrating hydrogen production, liquefaction, shipping, marine transport, and receipt to establish the world's first large-scale hydrogen liquefaction and transport technologies.

In Japan, we are participating in the Fukushima Plan for a New Energy Society, a project intended to produce green hydrogen using electric power generated from renewable energy sources. We are also studying a broad range of practical projects, including hydrogen production from plastic waste.

Our main LPG business has a customer base of more than 3.3 million households across Japan. We support our customers' lives in various aspects, including stable supplies, solutions, security, community contributions, and the environment. We are making energetic progress to achieve LPG decarbonization through various efforts, including research on decarbonization through supplying LPG mixed with hydrogen as well as propanation (synthetic green LPG production) as we head toward becoming the energy & living total service provider of choice for our customers and communities.

As we advance toward our 100th anniversary and beyond, we remain firmly committed to achieving sustained growth, and will continue to offer new value to all our stakeholders.

# Iwatani's History

## A History of Meeting Society's Needs and Rising to the Challenge of Innovation

The gas and energy businesses enrich our lives, support social progress, and lay a path to an enriched future. LPG, portable gas cooking stoves, helium, and hydrogen are examples.

As one of the first to identify the need for and the possibilities of gas and other energy sources, Iwatani has established stable supply networks and developed new products and technologies for using gas and other energy sources.

We will continue to make significant strides toward the future by ceaselessly pursuing the challenges of innovation to meet the world's needs, chiefly in the areas of gas and energy.

**1930**

Iwatani Naoji Shoten founded



**1953**

Marui Propane introduced



**1969**

Cassette-Feu (a hose-free portable cooking stove) introduced



**1997**

Acquired our first mineral sands operator in Australia



**2013**

First procurement of helium from Qatar



**2019**

Start of hydrogen-refueling station operations in the United States



**2022**

Feasibility testing of the world's first sea transport and loading/unloading of liquid hydrogen between Australia and Japan



Courtesy: HySTRA

**1945**

Iwatani Corporation established



**1958**

Osaka Hydrogen Industries Co., Ltd. (now Iwatani Industrial Gases Corporation) established



**1980**

Sakai LPG Import Terminal completed



**2006**

Hydro Edge Co., Ltd. commences operating Japan's largest liquid hydrogen production plant.



**2014**

Iwatani Hydrogen Refueling Station Amagasaki, Japan's first commercial hydrogen-refueling station, opens.



**2021**

Iwatani GateWay service introduced



The graph depicts the trend in net sales.

### Launching Japan's first sales of propane gas for household use

In the past, the job of a homemaker was highly laborious, involving bringing firewood to the stove and dealing with soot and smoke. In 1953, Iwatani became the first company to make propane gas available for household use in the Japan market, based on our founder Naoji Iwatani's idea that increased use of propane would free homemakers from soot. With the completion of the Sakai LPG Import Terminal in 1980, our first import terminal, we secured the rights to import LPG and established a position as a leading supplier in the industry.

### From a hydrogen pioneer to a leading supplier of hydrogen

Our first encounter with hydrogen took place in 1941, when we began supplying the gas to take advantage of surplus hydrogen produced in factories. We began supplying liquid hydrogen for use in rocket fuel in 1978 as a new energy application beyond its traditional industrial uses. In 2006, Hydro Edge, one of the world's largest liquid hydrogen production plants, began operating. Since then, we've made steady contributions to establishing a hydrogen energy-based society, including opening more than 50 hydrogen-refueling stations and constructing supply chains for CO<sub>2</sub>-free hydrogen.



# Message from the President

President **Hiroshi Majima**



In front of a model of the hydrogen fuel cell ship *Mahoroba*

**Continuing to help create a more comfortable space on the Earth through steady investments in growth and business expansion toward the goals of the PLAN27 medium-term management plan**

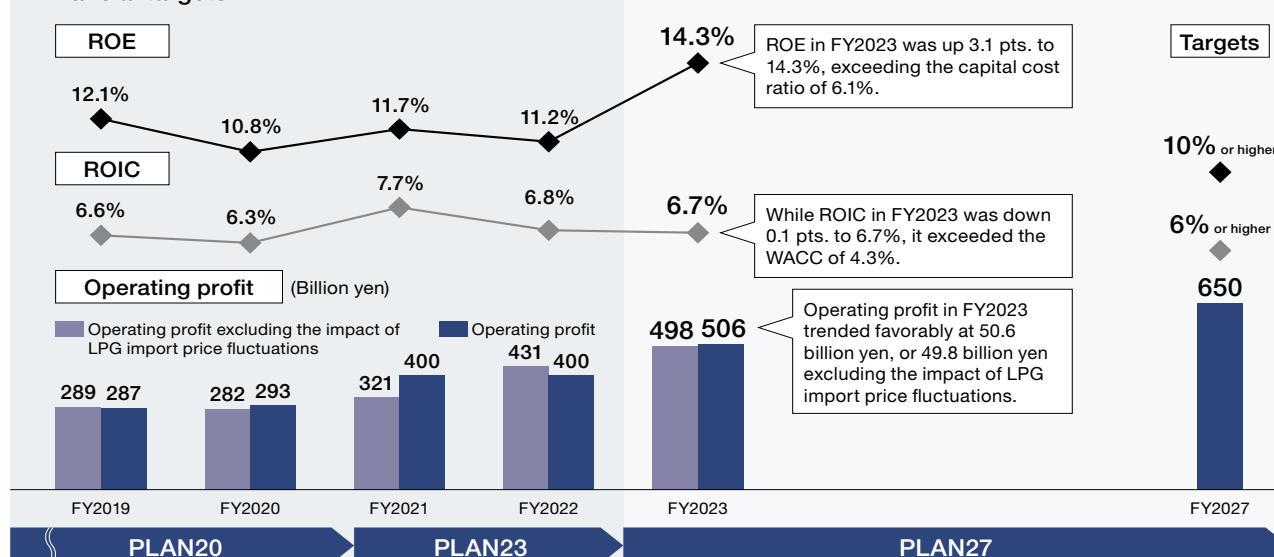
**FY2023 results: operating profit, ordinary profit, and net income reach new record highs**

While our net sales in FY2023 fell for various reasons, including lower LPG import prices than in the previous year, lower selling prices, and declining sales of rechargeable battery materials for use in next-generation vehicles, operating profit reached a new record high due to the progress of the Industrial Gases & Machinery Business's efforts since the previous year in addressing rising production costs, as well as improvements from the previous year in LPG market conditions. Other factors included the recording as non-operating expenses (income) of gain on negative goodwill from making Cosmo Energy Holdings Co., Ltd. an equity method affiliate. Both ordinary profit and net income reached record highs for the ninth consecutive year.

Under the PLAN27 medium-term management plan announced in June 2023, we are currently targeting the following financial targets: ROE of 10% or more; ROIC of 6% or more; and operating profit of 65 billion yen by FY2027. In FY2023, ROE was 14.3% and ROIC was 6.7%, both exceeding the cost of capital. Operating profit for the year was 50.6 billion yen as we got off to a promising start toward the medium-term management plan's target.

Our policy for the five-year period of PLAN27 is to advance investments in medium- to long-term growth in the hydrogen business and in other fields while actively investing in businesses that drive immediate revenues. We will continue to enhance the initiatives called for in PLAN27 while investing in future earnings.

## Financial targets



## Promoting a carbon-free society and creating new synergies through a business alliance with Cosmo Energy Holdings Co., Ltd.

In December 2023 and March 2024, we acquired shares of stock in Cosmo Energy Holdings Co., Ltd., making it an equity method affiliate.

We have a long transaction history with Cosmo Energy Holdings, including in the procurement of LPG, kerosene, and other resources in the energy field and purchases of raw materials for carbon dioxide in the industrial gases field. In March 2022, we concluded a basic agreement with Cosmo Energy Holdings to study partnering in the hydrogen business. Since then, we have advanced joint activities, such as joint ventures in the businesses of hydrogen-refueling stations and engineering. This stock acquisition reflects our conviction that the two companies will create new synergies and increase the corporate value of each company by deepening these joint efforts while combining the management resources and expertise of each company.

On April 23, 2024, the two companies concluded a business alliance agreement. The joint venture promotion committees established in both companies are currently discussing the

details of this business alliance, which will focus on the areas of initiatives to realize a carbon-free society and strengthening relationships in existing business fields. In the area of hydrogen energy, in addition to existing cooperative relations, we're considering leveraging the Cosmo Energy Group's service station network to grow our network of hydrogen-refueling stations. We're also building hydrogen supply networks to make the most of the business resources of both companies, including expertise and infrastructure, in the hydrogen business.

In the LPG business, we already have a transaction relationship with Gyxis Corporation, in which Cosmo Energy Holdings is an investor. Discussions are planned on topics such as the courses of action that the LPG business should target. In the industrial gases business, while procuring raw materials for carbon dioxide from Cosmo Oil Co., Ltd., we will study investments with an eye on enhancing procurement capabilities for such materials in response to their shortage in Japan due to factors such as the closing of petroleum plants. In the materials business, we

import and sell materials such as lithium and cobalt. Additionally, Cosmo Energy Exploration & Production Co., Ltd. is considering lithium-related businesses in North America. We will seek out opportunities for joint efforts across a broad range of fields. This acquisition of shares in Cosmo Energy Holdings is our largest investment ever, and the capital markets, also appear to be paying close attention to the possible consequences. We see it as an opportunity for growth, and our goal will be to reap the results of the business joint venture quickly through close discussions between the two partners.



Filling ceremony at the Iwatani Cosmo Hydrogen Refueling Station in Heiwajima. From left: President Yamada of Cosmo Energy Holdings, President Majima, Director-General Murase of the Agency for Natural Resources and Energy.

## Promoting initiatives in the areas of manufacturing, transport, and use, to realize a hydrogen energy-based society

In May 2024, the Japanese government passed the Hydrogen Society Promotion Act<sup>\*1</sup>, under which the government will cover the price differential between existing energy sources and hydrogen. The key points of this act include the requirement to propose schemes that involve not just producers but also consumers, and meeting the deadline of starting supply by 2030.

<sup>\*1</sup>: Hydrogen Society Promotion Act: Act intended to promote the supply and use of resources such as low-carbon hydrogen (i.e., hydrogen produced through methods that generate lower CO<sub>2</sub> emissions than traditional methods) to facilitate the transition to a low-carbon growth economy. Under this act, the Japanese government will make up the price differential vs. existing fuels for authorized corporate business plans for hydrogen production and imports. The Ministry of Economy, Trade and Industry is accepting applications from companies and is to approve one project before the end of the year.



This law defines as low-carbon hydrogen any hydrogen produced with approximately 70% less CO<sub>2</sub> emissions than grey hydrogen. It requires all hydrogen produced or imported to be low-carbon hydrogen.

Grey hydrogen refers to hydrogen produced from fossil fuels. Grey hydrogen produced without emitting CO<sub>2</sub> into the atmosphere, through means such as underground immobilization of CO<sub>2</sub> from the production process, is called blue hydrogen, while hydrogen produced using renewable energy without emitting any CO<sub>2</sub> during the production process is called green hydrogen. In this way, hydrogen is color-coded by its production process. To procure low-carbon hydrogen, Iwatani is engaged in a project to build a CO<sub>2</sub>-free hydrogen supply chain. We're studying ways to produce green hydrogen through electrolysis of water powered by renewable energy, chiefly solar power, in Queensland, Australia. In addition, our feasibility studies on commercial imports of large volumes of low-cost liquid hydrogen from overseas has been approved for funding from the Japanese government's Green Innovation Fund. We are currently revising the basic design in preparation for a final investment decision.



We're also moving forward, in cooperation with other firms, to develop the machinery needed to build hydrogen supply systems. Joint efforts are currently underway with Sumitomo Precision Products Co., Ltd. to develop large-scale liquid hydrogen vaporizers and with Mitsubishi Heavy Industries, Ltd. to develop liquid hydrogen pressurizing pumps. A joint research and development project with Toyo Kanetsu K.K. on large-scale liquid hydrogen storage tanks has been chosen to receive a NEDO subsidy. We expect supply of hydrogen from overseas sources to begin around 2030. We're also striving to meet growing demand for decarbonization by enhancing the domestic supply capacity. We currently operate three liquid hydrogen plants in Japan, with a further plant under consideration. We're currently planning to open a plant that will produce hydrogen from plastic waste, which is currently incinerated without recycling. This will lead to hydrogen production with greater reduction in greenhouse gas emissions than through natural gas reforming.

To date, we have focused on developing hydrogen-refueling stations for passenger fuel cell vehicles (FCVs). Now, in Tokyo and other locations, we're developing hydrogen-refueling stations for commercial vehicles in response to expectations for the growing adoption of fuel cell trucks and buses. On April 8, 2024, Iwatani Cosmo Hydrogen Station LLC, a joint venture with Cosmo Energy Holdings, opened its first hydrogen-refueling station in Tokyo's Heiwajima.

The first hydrogen-refueling station opened inside a truck terminal in Japan, and can quickly supply the large volumes of hydrogen needed by large commercial vehicles like fuel cell trucks and buses. We plan to continue developing refueling stations in accordance with future production plans for commercial vehicles and prefectural plans.

We don't just operate hydrogen-refueling stations—we are also hydrogen users. We've begun adopting and using fuel cell trucks and are the first in the industry to have begun using them to deliver cylinders of LPG and industrial gases, in Tokyo and Fukushima Prefecture. We plan additional adoption in the future, while also promoting efforts to reduce CO<sub>2</sub> emissions in the supply chain. With an eye toward growing applications in the mobility field as well, we will operate Japan's first hydrogen fuel cell ship at Expo 2025 Osaka, Kansai, Japan. This fuel cell ship, currently under construction, will carry some 150 passengers. Its name, *Mahoroba*, comes from an old Japanese phrase meaning *a nice place to live*. We plan to begin test operations during 2024 as we

prepare to operate the ship from April 2025.

Not only will the ship emit no CO<sub>2</sub> emissions during operations, this fuel cell ship will provide comfortable passage free of odors, noise, and vibration. International conferences, seminars, ceremonies, and other activities related to hydrogen are also planned to take place during Expo 2025. With the world's eyes focused on Osaka, we plan to take every step to ensure that this ship can demonstrate the full potential and appeal of hydrogen by capitalizing on its potential as a mobile pavilion.

### Promoting non-financial strategies to support sustainable growth: Climate change, human resources, technology

With nonfinancial information drawing increasing attention in assessing corporate long-term growth potential and sustainability, PLAN27 identifies non-financial strategies as a priority issue. We're moving forward with initiatives in the areas of addressing climate change, human resource strategy, and technology strategy in particular.

To address climate change, we've assessed risks and opportunities under individual scenarios and disclosed results of analysis through considering the business impacts of climate change under the Task Force on Climate-related Financial Disclosures (TCFD) framework.

We plan to reduce Group CO<sub>2</sub> emissions in Japan by 50% vs. the FY2019 level by FY2030. However, around 80% of the Iwatani Group's CO<sub>2</sub> emissions in Japan come from industrial gas production plants. Greater production volumes will increase emissions. For this reason, in addition to promoting measures to reduce use of electricity during gas production, we're pursuing various other initiatives, including the installation of solar panels at plants and the purchase of green electricity for office use.

► Climate Change [→ P.30]

Turning to our human resource strategy and technology strategy, we recognize that human resources represent the source of continuous value creation. Accordingly, we are striving to be an organization in which each and every employee can grow and thrive. Amid the increasing diversity of individual values, the workstyles employees seek out have evolved in recent years. We see the need to develop an environment in which employees can build their own careers autonomously. As opportunities for employees to acquire knowledge, we offer systematic training programs focusing on the development of human resources for digital transformation (DX), as well as the internal Iwatani Technology and Safety University, where courses are taught by visiting lecturers from the public and private sectors. We're considering technological development in partnership with universities to further strengthen our technological capabilities. We will seek to promote the exchange of technologies and human resources in various ways, including joint research with students in doctorate and other programs who have an interest in the subjects of our research and opportunities for employees to study at university.

A new training center is scheduled to be completed in Kobe, Hyogo Prefecture, in October 2024, as part of our continuing

efforts to emphasize HR development.

At the same time, employees need to feel a sense of psychological stability within an organization in order to demonstrate their abilities to the fullest. As a first step toward this goal, we undertook an engagement survey of employees to gauge their expectations and satisfaction and to better visualize the current state of the organization. We will strive to achieve a highly productive organization in which employees can work with a strong sense of motivation, based on an understanding among management and employees alike of what can be done to improve the organizational culture and by taking action accordingly.

▶ Human Resource Strategy [⇒ P.34]

### Actively investing in growth and increasing dividends steadily with growth in earnings

The basic concept of capital allocation identified in PLAN27 calls for investments that target sustained growth, including the development of a CO<sub>2</sub>-free hydrogen supply chain, by raising funds through bonds and borrowing from financial institutions,

in addition to the cash flow generated from operations over the course of the years covered by the plan. Internationally, in FY2023, in addition to mergers and acquisitions involving LPG retail and metalworking businesses in Japan, we built and expanded industrial gas production facilities, grew the CFC business, and expanded resource concessions in the materials business, all intended to be investments that grow earnings and contribute to the next stage of growth.

Our policy on returns to shareholders calls for a payout ratio of 20% or higher in FY2027, alongside progressive dividends that do not decrease. In FY2023, we paid dividends of 130 yen, up 35 yen from the previous year. Our payout ratio was 15.8%.

Beginning in FY2024, we also plan to pay dividends that reflect the effects on profit of making Cosmo Energy Holdings an equity method affiliate. We will continue to provide steady returns to our shareholders in ways that reflect profit growth.

▶ Capital Policies and Returns to Shareholders [⇒ P.16]

### Steady and dramatic progress with all stakeholders toward the 100th anniversary of our founding

Our long-term vision for 2030, the 100th anniversary of our founding, is to operate as a corporate group that continues to contribute to the creation of a more comfortable space on the Earth. The period covered by PLAN27 is an important time in which we will advance the strategies to achieve this long-term vision.

We got off to a strong start in FY2023, the first year of PLAN27. To maintain this progress, it will be vital to fulfill our corporate responsibilities while engaging in businesses needed by society, based on our corporate philosophy: Become a person needed by society, as those needed by society can prosper. We will continue to make investments that lead to growth and strive toward sustained growth in corporate value through businesses that seek to deliver solutions to society's challenges.

We are grateful for the continuing understanding and support of our stakeholders.



September 2024  
President

*Kiroshi Majima*