

**Iwatani**

# **FY2023 1<sup>st</sup> Half Financial Results**

## **(Results for the Six Months Ended September 30, 2023)**

**November 17, 2023**

**Iwatani Corporation**

**[Securities code 8088]**

(Forward-Looking Statements)

This material contains forward-looking statements based on expectations and are not guarantees or assurances of future performance. Accordingly, please be fully aware that results may differ materially from those expectations.

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## **1. FY2023 1st Half Overview**

- Highlights
- Consolidated Operating Results (Analysis of Net Sales)
- Consolidated Operating Results (Analysis of Operating Profit)
- Consolidated Operating Results (Segment Analysis)
- Operating Profit Analysis of Each Segment
- Balance Sheet (Consolidated)
- Statement of Cash Flows

## **2. FY2023 Forecasts**

- Forecasts for the year ending March 31, 2024
- Forecasts of Each Segment
- Returns to Shareholders

## **3. Progress of Medium-Term Management Plan “PLAN27”**

- Overview
- Progress of Priority Measures

# FY2023 1<sup>st</sup> Half Overview

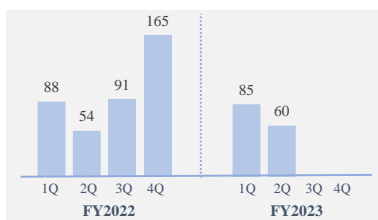
- ▶ Decrease in net sales. Despite the negative impact of LPG import price fluctuation, strong sales of products for industrial use contributed to increase in operating profit which marked record high.

## Summary of Financial Results for the 1<sup>st</sup> Half of FY2023

- Decrease in net sales due to lower LPG import prices, decrease in sales volumes of LPG and decline in sales of rechargeable battery materials.
- Increase in operating profit due to strong sales of products for industrial use, despite the negative impact of LPG import price fluctuation compared to the previous year.
- Full-year financial forecasts: no change

Net sales	<b>394.2</b> billion yen	YoY (19.0) billion yen	(4.6%)
Operating profit	<b>14.5</b> billion yen	YoY +0.2 billion yen	+1.9%
Ordinary profit	<b>18.1</b> billion yen	YoY (0.1) billion yen	(0.7%)
Profit attributable to owners of parent	<b>12.0</b> billion yen	YoY (0.5) billion yen	(4.3%)

■ Operating profit quarterly trends (100 million yen)



\*The figures for the 1Q, 2Q, 3Q of FY2022 reflect the finalization of the provisional accounting treatment for a business combination.

Although net sales declined YoY in this FY2023 H1 financial results, operating income increased and reached a new record high due to strong sales of products for the industrial sector, despite the negative impact of factors in the LPG market.

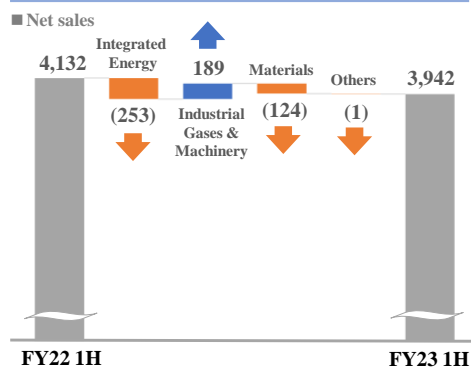
# Consolidated Operating Results (Analysis of Net Sales)

**Iwatani**  
(100 million yen)

	FY23 1H Results (A)	FY22 1H Results (B) *	YoY (A)-(B) (A)/(B)	FY23 Forecasts	Progress
Net sales	3,942	4,132	(190) (4.6%)	9,070	43.5%
Gross profit	1,009	981	+27 +2.8%	-	-
Operating profit	145	143	+2 +1.9%	450	32.4%
Operating profit excluding impact of LPG import price fluctuation	197	137	+59 +43.1%	450	43.8%
Non-operating income/expenses	35	39	(3) (9.8%)	-	-
Ordinary profit	181	183	(1) (0.7%)	503	36.2%
Profit attributable to owners of parent	120	126	(5) (4.3%)	335	36.0%

## Decrease factors

- lower LPG import prices and decrease in sales volume due to higher temperature
- decrease in sales of rechargeable battery materials caused by inventory adjustments at sales destinations
- strong sales of products for industrial use



\* The figures for the 1<sup>st</sup> half of FY2022 reflect the finalization of the provisional accounting treatment for a business combination.

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4

Net sales decreased JPY19 billion, or 4.6%, YoY to JPY394.2 billion as a result of lower LPG import prices and lower LPG sales volume due to higher temperatures, as well as weak sales of EV-related battery materials due to industry-wide inventory adjustments.

Despite the negative JPY5.6 billion impact of LPG import price fluctuation compared to the previous year, gross profit increased 2.8% to JPY100.9 billion, up JPY2.7 billion, as a result of strong sales of products for the industrial sector and our response to increased manufacturing and procurement costs.

# Consolidated Operating Results (Analysis of Operating Profit)

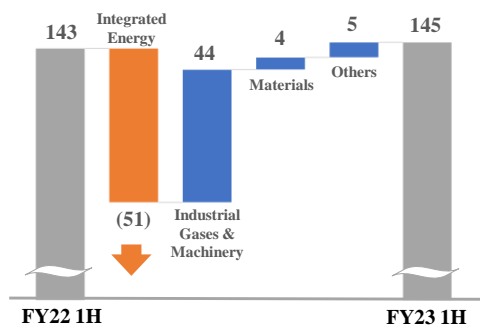
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Profit attributable to owners of parent	120	126	(5) (4.3%)	335	36.0%

\* The figures for the 1<sup>st</sup> half of FY2022 reflect the finalization of the provisional accounting treatment for a business combination.

## Increase factors

- strong sales of products for industrial use contributed to increase in operating profit despite the negative impact of LPG import price fluctuation
- decrease in non-operating income/expenses due to decline in share of profit of entities accounted for using equity method and increase in interest expense, which led to decrease in ordinary profit and profit attributable to owners of parent

## Operating profit



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SG&A expenses increased by JPY2.4 billion due to increases in personnel expenses and depreciation and amortization, but operating income increased by JPY0.2 billion, or 1.9%, to JPY14.5 billion.

As a result, the company recorded its highest profit ever in Q2.

Non-operating income decreased due to a decrease in equity in earnings of affiliates and an increase in interest expenses, and ordinary income decreased by JPY0.1 billion, or 0.7%, to JPY18.1 billion.

As a result, net income for the quarter declined JPY0.5 billion, or 4.3%, to JPY12 billion.

# Consolidated Operating Results (Segment Analysis)

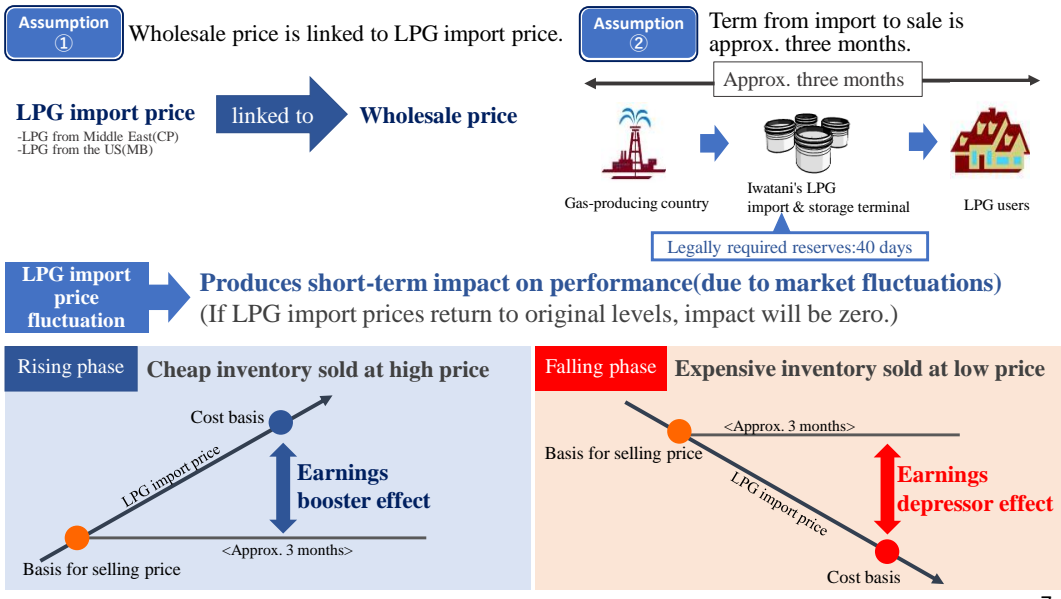
**Iwatani**  
(100 million yen)

	FY23 1H Results (A)	FY22 1H Results (B)	YoY (A)-(B)	YoY (A)/(B)	FY23 Forecasts	Progress
Net sales	3,942	4,132	(190)	(4.6%)	9,070	43.5%
■ Integrated Energy	1,433	1,686	(253)	(15.0%)	3,980	36.0%
■ Industrial Gases & Machinery	1,268	1,079	+189	+17.6%	2,592	48.9%
■ Materials	1,085	1,210	(124)	(10.3%)	2,202	49.3%
■ Others	155	156	(1)	(1.1%)	296	52.4%
Operating profit	145	143	+2	+1.9%	450	32.4%
■ Integrated Energy	(11)	39	(51)	-	180	-
■ Industrial Gases & Machinery	108	64	+44	+69.5%	175	62.0%
■ Materials	62	57	+4	+8.1%	123	50.9%
■ Others, Adjustments	(13)	(17)	+4	-	(28)	-
Operating profit excluding impact of LPG import price fluctuation	197	137	+59	+43.1%	450	43.8%
Ordinary profit	181	183	(1)	(0.7%)	503	36.2%
Profit attributable to owners of parent	120	126	(5)	(4.3%)	335	36.0%

\* The figures for the 1<sup>st</sup> half of FY2022 reflect the finalization of the provisional accounting treatment for a business combination.

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# Impact of LPG Import Price Fluctuations



We will briefly explain the impact of LPG import price fluctuations on our business performance.

We import LPG from the Middle East and the US. in order to equalize the fluctuation of import prices. We have a pricing structure with many of our wholesale partners whereby selling prices are linked to import prices.

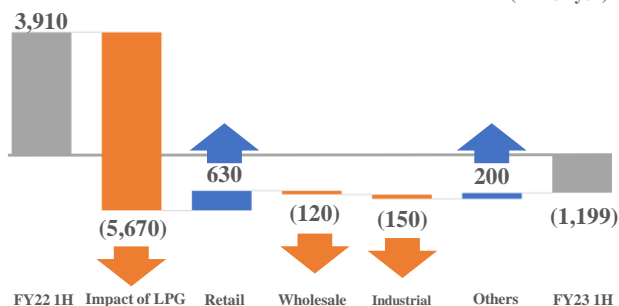
On the other hand, we use the FIFO method for inventory valuation, but because of the time it takes to import and sell LPGs, we sell inventory purchased approximately three months in advance.

In this way, when LPG import prices rise, we sell inventories purchased at low costs at a higher price, while when prices fall, we sell inventories purchased at high cost at a lower price. We refer to these effects as LPG import price fluctuation.



Results						
(100 million yen)						
	FY23 1H Results (A)	FY22 1H Results (B)	YoY (A)-(B)	YoY (A)/(B)	FY23 Forecasts	Progress
Net Sales	1,433	1,686	(253)	(15.0%)	3,980	36.0%
Operating Profit	(11)	39	(51)	-	180	-
Operating profit excluding impact of LPG import price fluctuation	39	33	+5	+16.7%	180	21.9%

## Analysis of Changes in Operating Profit



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## Main factors

### ■ Impact of LPG import price fluctuation (5,670)

(100 million yen)	1Q	2Q	1H	3Q	4Q	Full year
FY23	(17.3)	(34.0)	(51.3)	-	-	-
FY22	+20.4	(15.0)	+5.3	(29.3)	(7.3)	(31.3)
Changes	(37.7)	(19.0)	(56.7)	-	-	-

### ■ Retail +630

-improvement in profitability of LPG

### ■ Wholesale (120)

-decrease in sales due to cancellation of barter trading

### ■ Industrial (150)

-decrease in LPG sales for calorific adjustment for city gas

### ■ Others +200

-strong sales of gas-related safety equipment

In the Integrated Energy Business, net sales declined JPY25.3 billion to JPY143.3 billion due to low LPG import prices and lower sales volume caused by high temperatures.

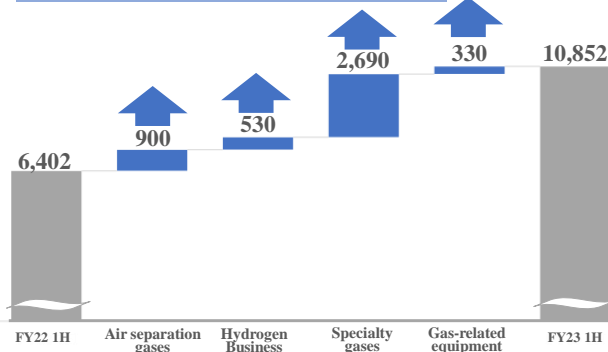
Despite improved profitability in the LPG retail sector and solid sales of gas safety equipment and other products, LPG import price fluctuation resulted in a negative JPY5.6 billion versus the previous year, resulting in a JPY1.1 billion operating loss, a JPY5.1 billion decrease.

Excluding these LPG import price fluctuation, operating income was JPY3.9 billion, an increase of JPY0.5 billion.

# Operating Profit Analysis of Industrial Gases & Machinery

Results		(100 million yen)				
	FY23 1H Results (A)	FY22 1H Results (B)	YoY (A)-(B)	YoY (A)/(B)	FY23 Forecasts	Progress
Net Sales	1,268	1,079	+189	+17.6%	2,592	48.9%
Operating Profit	108	64	+44	+69.5%	175	62.0%

## Analysis of Changes in Operating Profit (million yen)



## Main factors

- Air separation gases +900**  
 -decrease in sales volume mainly for the electronic component industry  
 -took an action toward growing production cost
- Hydrogen Business +530**  
 -decrease in sales volume mainly for the semiconductor industry  
 -took an action toward growing production cost
- Specialty gases +2,690**  
 -strong sales of carbon dioxide for the beverage and chemical industries  
 -stable procurement and supply of helium
- Gas-related equipment +330**  
 -improve in sales of power semiconductors-related equipment  
 -increase in sales of gas-related equipment

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In the Industrial Gases & Machinery Business, sales volumes of air separation gas and hydrogen gas decreased, mainly to the semiconductor and electronic components industries, but profitability improved as a result of efforts to respond to increased production costs associated with higher electricity rates.

With regard to specialty gases, carbon dioxide gas sales to the beverage and chemical industries remained strong, and efforts were made to ensure a stable supply of helium amid a worldwide supply-demand crunch.

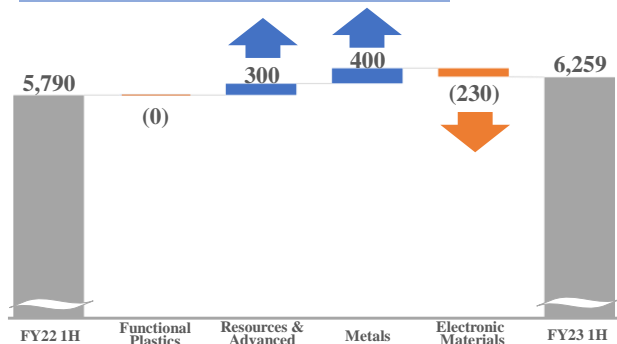
In machinery and equipment, sales of equipment for power semiconductors, a growing market, and gas supply facilities increased.

As a result, net sales increased JPY18.9 billion to JPY126.8 billion and operating income rose 69.5% to JPY10.8 billion.

# Operating Profit Analysis of Materials

Results		(100 million yen)				
	FY23 1H Results (A)	FY22 1H Results (B)	YoY (A)-(B)	YoY (A)/(B)	FY23 Forecasts	Progress
Net Sales	1,085	1,210	(124)	(10.3%)	2,202	49.3%
Operating Profit	62	57	+4	+8.1%	123	50.9%

## Analysis of Changes in Operating Profit (million yen)



## Main factors

- Functional Plastics Products (0)**
  - increase in sales of PET resin for beverage bottles
  - weak sales of resin materials
- Resources & Advanced Materials +300**
  - expansion of mineral sand business in overseas
  - increase in sales of biomass fuel
- Metals +400**
  - strong sales of stainless steel
  - increase in sales of processed metal products mainly for air conditioners
- Electronic Materials (230)**
  - increase in sales of battery-related materials for next-generation vehicles due in part to inventory adjustments at sales destinations

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10

In the Materials Business, sales volume of EV-related battery materials for next-generation vehicles decreased due to inventory adjustments at our retailers, but sales of biomass fuel and PET resin for beverage bottles increased.

In addition, growth in the mineral sands business overseas and solid sales of stainless steel and metal processed products, mainly for air conditioners, resulted in a JPY12.4 billion decrease in net sales to JPY108.5 billion, but an 8.1% increase in operating income to JPY6.2 billion.

Regarding the change of segment, the Agri-Bio & Foods Business, which was one of our business segments until last fiscal year, was transferred to UM System, which was acquired the year before last, and has been renamed to Iwatani Foods, which, together with consolidated subsidiary Iwatani Camborough, is now listed in the "others" segment.

Iwatani Agri Green, which was also a consolidated subsidiary in the Agri-Bio & Foods Business, transferred its business to two consolidated subsidiaries in the Materials Business.

## Balance Sheets (Consolidated)

- Increase in total assets due to the increase in property, plant and equipment by making a capital investment, and investment securities despite the decrease in trade receivables.
- Interest-bearing debt increased due to the funding of capital investment in Japan and overseas.

(100 million yen)

	Sept. 30, 2023 (A)	Mar. 31, 2023 (B)	Change (A)-(B)	Major factors for changes
<b>Current assets</b>	<b>2,883</b>	<b>3,031</b>	<b>(148)</b>	decrease in trade receivables
Property, plant and equipment	2,139	2,074	+64	
Intangible assets	373	368	+5	
Investments and other assets	1,304	1,085	+219	increase in investment securities due to stock market incline
<b>Fixed assets</b>	<b>3,817</b>	<b>3,528</b>	<b>+289</b>	
<b>Total assets</b>	<b>6,701</b>	<b>6,560</b>	<b>+141</b>	
<b>Current liabilities</b>	<b>2,056</b>	<b>2,124</b>	<b>(67)</b>	
<b>Non-Current liabilities</b>	<b>1,344</b>	<b>1,313</b>	<b>+31</b>	
<b>Total liabilities</b>	<b>3,401</b>	<b>3,437</b>	<b>(36)</b>	interest-bearing debt, (gross)161.0 billion yen (+21.5 billion yen) ratio of interest-bearing debt to total assets 24.0%
<b>Equity</b>	<b>3,193</b>	<b>3,019</b>	<b>+173</b>	equity ratio 47.7%
<b>Non-controlling interests</b>	<b>106</b>	<b>102</b>	<b>+4</b>	
<b>Net Assets</b>	<b>3,299</b>	<b>3,122</b>	<b>+177</b>	
<b>Total liabilities and net assets</b>	<b>6,701</b>	<b>6,560</b>	<b>+141</b>	

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11

Total assets at the end of September increased JPY14.1 billion from the end of the previous period to JPY670.1 billion. Shareholders' equity increased JPY17.3 billion to JPY319.3 billion, mainly due to an increase in retained earnings, and the equity ratio increased 1.7 percentage points to 47.7%.

On the other hand, interest-bearing debt increased JPY21.5 billion from the end of the previous fiscal year to JPY161 billion to finance aggressive capital investments in Japan and overseas, and the debt-to-capital ratio is 24%.

## Statement of Cash Flows

Operating cash flow provided 9.8 billion yen. Investing cash flow was an outflow of 29.8 billion yen due to aggressive investments. As a result, free cash flow was an outflow of 20 billion yen. (100 million yen)

	FY23 1H(A)	FY22 1H(B)	YoY (A)-(B)
Cash flows from operating activities	98	(5)	+103
Cash flows from investing activities	(298)	(350)	+51
Free cash flows	(200)	(355)	+155
Cash flows from financing activities	125	366	(240)
Effect of exchange rate changes, etc.*1	10	24	(13)
Net increase (decrease) in cash and cash equivalents*2	(63)	35	(98)
Cash and cash equivalents at beginning of period	332	295	+36
Cash and cash equivalents at end of period	268	330	(62)

\*1 "Effect of exchange rate changes, etc." are the sum of "Effect of exchange rate changes", "Increase (decrease) in cash and cash equivalents due to changes in scope of consolidation", and "Increase in cash and cash equivalents resulting from merger with nonconsolidated subsidiaries".

\*2 The difference between "Cash and cash equivalents at beginning of period" and "Cash and cash equivalents at end of period" is shown.

Operating cash flow was a net inflow of JPY9.8 billion due to income from profits and depreciation, and payment of income taxes, while investing cash flow was a net outflow of JPY29.8 billion due to aggressive investment and other factors.

As a result, free cash flow was negative JPY20 billion.

Net cash provided by financing activities amounted to JPY12.5 billion, mainly due to an increase in borrowings.

# FY2023 Forecasts

# Forecasts for the year ending March 31, 2024

Iwatani

NO change from original forecasts

(100 million yen)

	FY23 Forecasts (A)	FY22 Results (B)	Change (A)-(B)	Rate (A)/(B)
<b>Net sales</b>	<b>9,070</b>	<b>9,062</b>	<b>+7</b>	<b>+0.1%</b>
■ Integrated Energy	3,980	3,932	+47	+1.2%
■ Industrial Gases & Machinery	2,592	2,404	+187	+7.8%
■ Materials	2,202	2,424	(222)	(9.2%)
■ Others	296	302	(6)	(2.0%)
<b>Operating profit</b>	<b>450</b>	<b>400</b>	<b>+49</b>	<b>+12.4%</b>
■ Integrated Energy	180	143	+36	+25.9%
■ Industrial Gases & Machinery	175	165	+9	+5.7%
■ Materials	123	126	(3)	(2.4%)
■ Others, Adjustments	(28)	(34)	+6	—
<b>Operating profit excluding impact of LPG import price fluctuation</b>	<b>450</b>	<b>431</b>	<b>+18</b>	<b>+4.2%</b>
<b>Ordinary profit</b>	<b>503</b>	<b>470</b>	<b>+32</b>	<b>+7.0%</b>
<b>Profit attributable to owners of parent</b>	<b>335</b>	<b>320</b>	<b>+14</b>	<b>+4.6%</b>

## Estimated exchange rate

Exchange rate 125.0 JPY/\$  
LPG import price 700\$/t

FY2022 result  
Exchange rate 133.7 JPY/\$  
LPG import price 725\$/t

## Dividend forecast

FY23 95 yen per share

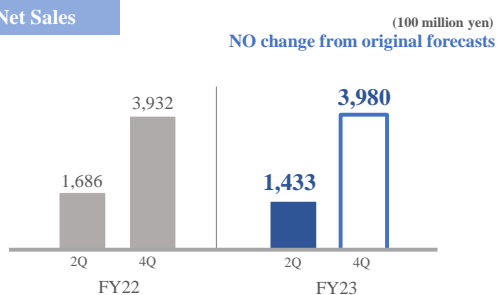
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14

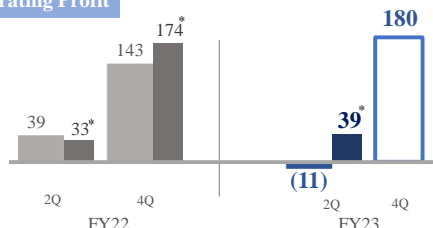
For the fiscal year ending March 31, 2024, we have not changed our forecasts announced at the beginning of the fiscal year: net sales of JPY907 billion, operating income of JPY45 billion, ordinary income of JPY50.3 billion, and net income of JPY33.5 billion.

# FY2023 Forecasts of Integrated Energy

## Net Sales



## Operating Profit



\*excluding impact of LPG import price fluctuation

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## Measures toward achievement of FY2023 forecasts

### - Expanding LPG sales

- increase in sale volumes by expanding LPG direct sales customers through M&A
- promoting fuel conversion to support customers' low-carbon and decarbonization, and expanding sales of carbon offset LPG

### - Expanding sales of energy-related equipment

- expand sales of carbon neutral products (ENE-FARM, solar panel, rechargeable battery)
- expand sales of LPG emergency generators and GHP for BCP measures
- expand sales of gas safety equipment to broaden the coverage area of centralized supervisory system

### - Expanding cartridge gas business

- cover the demand of cooking and heating use in Japan
- strengthen the sales mainly in Southeast Asia by leveraging new manufacturing plant in Thailand besides China

## Main factors causing changes in business performance

- Trends in LPG import price, exchange rate fluctuations
- Effect of LPG sales volume due to higher temperature

In the Integrated Energy Business, we forecast a 1.2% increase in net sales to JPY398 billion and a 25.9% increase in operating income to JPY18 billion.

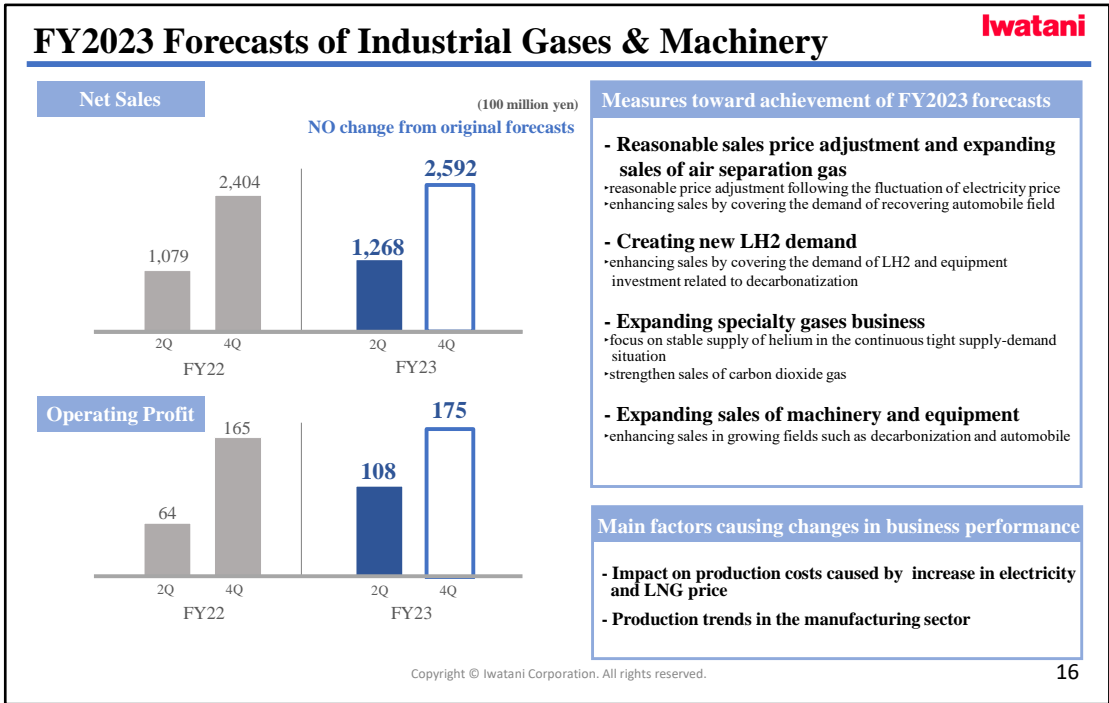
The impact of market conditions is excluded in the forecast of business performance. Last year's results included a market factor of minus JPY3.1 billion, which translates into a 3.2% increase in operating income compared to last year's operating income excluding the market factor.

LPG import price fluctuation resulted in a negative JPY5.6 billion in H1, but with LPG import prices on an upward trend, we expect the negative impact to be mitigated.

We will continue to strengthen our low-carbon and decarbonization business initiatives during the transition to carbon neutrality by taking in M&A deals to expand the number of LPG direct sales customers and promoting fuel conversion from oil to LPG for industrial customers.

In the Cartridge Gas Business, we will steadily capture domestic demand and strengthen overseas markets by expanding sales in Southeast Asia, starting with a new plant in Thailand, besides China.





In the Industrial Gases & Machinery Business, we forecast sales of JPY259.2 billion, an increase of 7.8%, and operating income of JPY17.5 billion, an increase of 5.7%.

Although the electronic components industry is expected to remain sluggish, we will continue our efforts to expand sales of gas and machinery equipment to the vehicles industry, which is recovering, and to growth areas such as power semiconductors and decarbonization.

In the hydrogen business, we will continue to meet the growing demand for decarbonization applications.

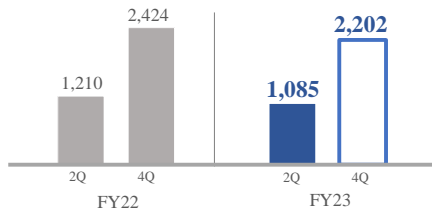
As for specialty gases, we will continue to strive for a stable supply of helium amid an expected tight supply and demand situation, and expand sales of carbon dioxide gas, mainly to the beverage and chemical industries.

# FY2023 Forecasts of Materials

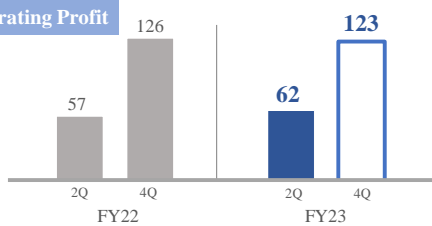
## Net Sales

(100 million yen)

NO change from original forecasts



## Operating Profit



## Measures toward achievement of FY2023 forecasts

- **Enhancing mineral resources business**
  - secure stable procurement amid declining market prices
  - promoting efforts to acquire new mining sites
- **Enhancing environmental businesses**
  - expanding sales of environmental products (eco-friendly PET resins, biomass fuels, battery-related materials)
  - promoting new initiatives such as recycling business
- **Expanding metal business**
  - expanding sales of stainless steel to new customers
  - expanding overseas metal processing business
- **Expanding sales of advanced material**

## Main factors causing changes in business performance

- **Price fluctuations in resource markets**
- **Exchange rate fluctuations**

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For the Materials Business, we forecast net sales of JPY220.2 billion, down 9.2%, and operating income of JPY12.3 billion, down 2.4%.

In EV-related battery materials, sales are expected to be sluggish due to continued inventory adjustments by retailers, and market conditions for various raw materials are also expected to remain weak. However, we will work to expand sales and ensure stable supply of major products such as PET resin and stainless steel, which performed well in H1.

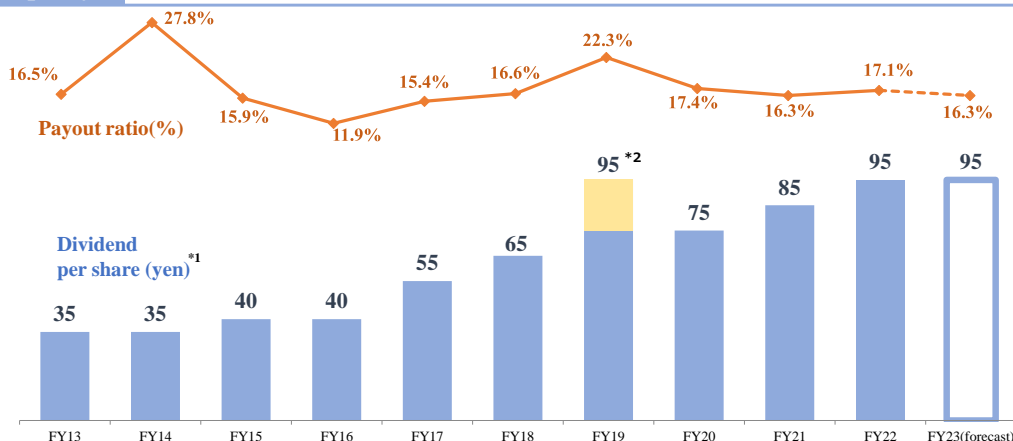
With regard to resources, we will continue to strive for stable procurement and supply, and at the same time, we will move forward with efforts to acquire new concessions.

# Returns to Shareholders

▶ A dividend of 95 yen per share is planned for the fiscal year ending March 31, 2024.

**Dividend policy**

- Increase dividends steadily in line with growth profit while securing investment capital
- Progressive dividend targeting a payout ratio of 20% or higher in FY2027



\*1 The figures from FY13 to FY16 are calculated based on the consolidation of shares (5 shares to 1 share).

\*2 Including commemorative dividend : 20 yen

At this stage, we plan to pay a dividend of JPY95 per share for the fiscal year ending March 31, 2024, the same as the previous year, as announced at the beginning of the fiscal year.

The capital policy of PLAN27 calls for a progressive dividend with no reduction in dividend payments, and we will continue to return profits to shareholders appropriately, taking into consideration our business performance and the business environment.

# Progress of Medium-Term Management Plan “PLAN27”

<b>Theme</b>	<b>Establishing a hydrogen energy-based society</b>	
<b>Basic Policy</b>	<b>Business expansion to achieve “solutions to social issues” and “sustained growth”</b>	
<b>▶ Management Targets</b>		<b>▶ Priority Measures</b>
Operating profit	¥65.0 billion	<ol style="list-style-type: none"> <li>1. Hydrogen Strategies</li> <li>2. Carbon-free Strategies</li> <li>3. Domestic Energy &amp; Service Strategies</li> <li>4. Overseas Strategies</li> <li>5. Non-financial Strategies</li> </ol>
ROE	10% or higher	
ROIC	6% or higher	
<b>▶ Capital Policies</b>		
5-year cumulative investment	¥470.0 billion	
Returns to shareholders	Payout ratio* of 20% or higher Progressive dividend <small>*Based on net income (excluding impact of LPG import price fluctuation) FY2027 target</small>	

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The theme is "establishing a hydrogen energy-based society," and the basic policy is "business expansion to achieve 'solutions to social issues' and 'sustained growth'".

The numerical management targets are to accomplish an operating income of JPY65 billion and profitability targets of 10% ROE or higher and 6% ROIC or higher, with a planned total investment of JPY470 billion over a five-year period.

Under PLAN27, we are pursuing initiatives in five key areas: Hydrogen Strategies, Carbon-free Strategies, Domestic Energy & Service Strategies, Overseas Strategies, and Non-financial Strategies.

Hydrogen Strategies

**Manufacture**

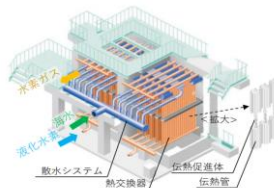
- ▶ began the Front End Engineering Design for the Creation of a Large-Scale Green Liquefied Hydrogen Supply Chain



Artist's depiction of of hydrogen manufacturing plant in Australia

**Transport**

- ▶ joint development projects underway include those on LH2 pressurizing pumps with Mitsubishi Heavy Industries, Ltd., open rack LH2 vaporizer with Sumitomo Precision Products Co., Ltd., and large scale LH2 storage tanks with Toyo Kanetsu K.K. which government subsidy will be provided



open rack LH2 vaporizer

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With regard to our Hydrogen Strategies, we have begun basic design work toward a final investment decision on a project in Queensland, Australia, for the large-scale production of green hydrogen derived from renewable energy sources.

The project is a collaboration of five companies, including Stanwell, a state-owned energy infrastructure company.

We will also work toward the establishment of a CO2-free hydrogen supply chain in conjunction with a project currently underway with Kawasaki Heavy Industries, INPEX, and others, which utilizes the government's Green Innovation Fund.

In addition, we are collaborating with other companies on related equipment for the construction of a hydrogen supply system.

We are jointly developing a large-scale liquid hydrogen vaporizer with Sumitomo Precision Products and a liquid hydrogen compressor with Mitsubishi Heavy Industries.

In addition, our research and development with Toyo Kanetsu for the practical application of large liquid hydrogen storage tanks has been selected for a grant from NEDO. We will continue to develop the equipment and facility technologies necessary to realize a hydrogen energy-based society.

### Hydrogen Strategies

#### Use

- now constructing Japan's first liquefied hydrogen marine carrier
- opened Japan's first hydrogen-refueling station at the rest area on highway



liquefied hydrogen marine carrier which will be operated at the Expo 2025 Osaka, Kansai, Japan



Iwatani Hydrogen Refueling Station in Ashigara SA

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22

To meet growing demand for hydrogen, we have decided to operate Japan's first hydrogen fuel cell ship for passenger service at the Expo 2025 Osaka Kansai in anticipation of expanding applications in the mobility field.

Liquefied hydrogen marine carriers not only do not emit CO<sub>2</sub> when cruising, they are also comfortable and free of odor, noise, and vibration. During the period, we plan to hold hydrogen-related international conferences, various seminars, and ceremonies, and will make the most effective use of the pavilion as a "moving pavilion."

And we have opened a hydrogen-refueling station at Ashigara Service Area on the Tomei Expressway, the first of its kind in Japan for an expressway service area/parking area.

In addition, hydrogen is required to be made on a large scale to accommodate trucks, buses, and other large commercial vehicles. To this end, we are proceeding with the construction of a hydrogen-refueling station at the Keihin Truck Terminal in a joint venture with Cosmo Oil, with a view to opening the station next spring, and are also planning to open two new stations in Shinsuna and Ariake in Koto-ku, Tokyo.

In terms of delivery vehicles, which are indispensable for the stable supply of LPG and industrial gas, we have introduced four fuel cell trucks at our bases in Tokyo and Fukushima Prefecture. This is the industry's first hydrogen-powered cylinder delivery, and we plan to introduce additional fuel-cell trucks in the future and will continue to promote efforts to reduce CO<sub>2</sub> emissions in the supply chain.

## Carbon-free strategies

- installing high-efficiency gas water heaters to household and convert resulting CO2 emissions reductions to credits

- common resin, generated from renewable resources, has been adopted by resin processing manufacturer in Japan



biomass common resin cutlery

## Domestic Energy & Service Strategies

- building LPG cylinder filling station inside Negishi Liquefied Gas Terminal



Artist's depiction of LPG cylinder filling station

LPG direct customers(end of Sept. 2023)  
**1.11 million**  
 (+10k compared with end of Mar. 2023)

As for our Carbon-free Strategies, we are working to value the CO2 reductions achieved through the installation of solar power generation and high-efficiency gas water heaters to ordinary households, etc., by utilizing the government's J-Credit system.

In addition, general-purpose resins containing biomass raw materials made from renewable resources have been newly adopted by domestic resin processing manufacturers, and the sales volume of biomass fuels has been expanding due to the conclusion of long-term contracts and other factors to expand our environmental products.

In our Domestic Energy & Service Strategies, the number of LPG direct sales customers increased by 10,000 households from the end of March to 1.11 million households at the end of September, contributing to revenue growth. We also began construction of a filling station for cylinders at the Negishi Liquefied Gas Terminal and made efforts to strengthen and rationalize the LPG supply system in the Kanto metropolitan area.



## Overseas Strategies

- expansion of air separation plant in China
- built helium center at inland area of China



air separation plant at Jiaxing city



helium center at Xiaogan city

- opened portable cooking stove plant in Thailand



portable cooking stove plant in Thailand

## Non-financial Strategies

- disclosure of TCFD scenario analysis

Scenario	4°C scenario	2°C scenario
Potential societal outcomes	In this scenario, society is characterized by economic and social growth accompanied by the continuing extensive development of fossil fuel sources and the continuance of resource- and energy-intensive lifestyles. Average temperatures rise by approximately 4°C by the end of the century, generating the high likelihood that climate change will affect business activities and results.	In this scenario, bold policies and technological innovations will be pursued to move toward carbon neutrality and to achieve the ambitious medium- and long-term targets currently articulated by each country. Average temperature increases through the end of this century are kept to less than 2°C. The social changes associated with the transition to a decarbonized society are very likely to affect business activities and results.
	In this scenario, significant physical impacts will be generated, alongside the significant impact of enhanced regulations and other factors accompanying the transition to a decarbonized society.	

scenario analysis disclosed at our website

- opened internal university of technology and safety



Opening ceremony of Iwatani Technology and Safety University

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24

In our Overseas Strategies, in response to strong demand in East China, we expanded our air separation gas production facilities in addition to installing a new hydrogen filling facility at our plant in Jiaxing. As for helium, for which demand is growing, we opened our second helium center in China, located in inland China, and started operation in October.

In Southeast Asia, where economic growth continues, in addition to the newly established helium center in Thailand, we are working to further expand our business by expanding manufacturing functions in the metal processing business and launching a manufacturing plant for portable gas cooking stoves.

Our Non-financial Strategies is to assess risks and opportunities by scenario with respect to the impact of climate change on our business, and to publish the results of our analysis.

We have also established the Iwatani Technology and Safety University as an in-house university to improve our knowledge and capabilities in technology and safety control, which support our core business of gas and energy.

We aim to improve our ability to make proposals and respond to on-site situations related to safety control and technology, and to develop human resources to promote future business expansion. We will strengthen our system to safely supply LPG, industrial gas, and hydrogen, and to implement the technological strategy set forth in PLAN 27.

# Iwatani

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