



Kobelco Group Initiatives in the Machinery Business

July 6, 2023
Kobe Steel, Ltd.

Five key measures toward establishing a stable earnings

1 Strengthening the earnings base of the steel business

- ❑ Lowering break-even point
- ❑ Improving product mix

2 Smooth startup and stable operation of new electric power projects

- ❑ Ensuring stable operation of existing power plants
- ❑ Securing stable earnings with the start of operation of Kobe Power Plant No. 3 and 4 units

3 Strategic investment in the materials businesses leading to earnings contribution

- ❑ Realizing steady and early contribution to earnings from strategic investment for automotive weight reduction

4 Restructuring unprofitable businesses

- ❑ Making the steel casting and forging, titanium, and crane businesses return to profitability

5 Stabilizing earnings in the machinery businesses and responding to growing markets

- ❑ Enhancing environmental contribution lineup and strengthening of collaboration in the Group
- ❑ Reforming earnings structure of the construction machinery business

Stabilizing earnings in the machinery businesses and responding to growing markets

Machinery

■ Focus of today's presentation

Engineering

MIDREX® Process

Sep. 2021
ESG Seminar

Presentation materials

Kobelco Eco-Solutions

Sep. 2022
Environmental Contribution Initiatives
in the Machinery Business

Presentation materials

Construction Machinery

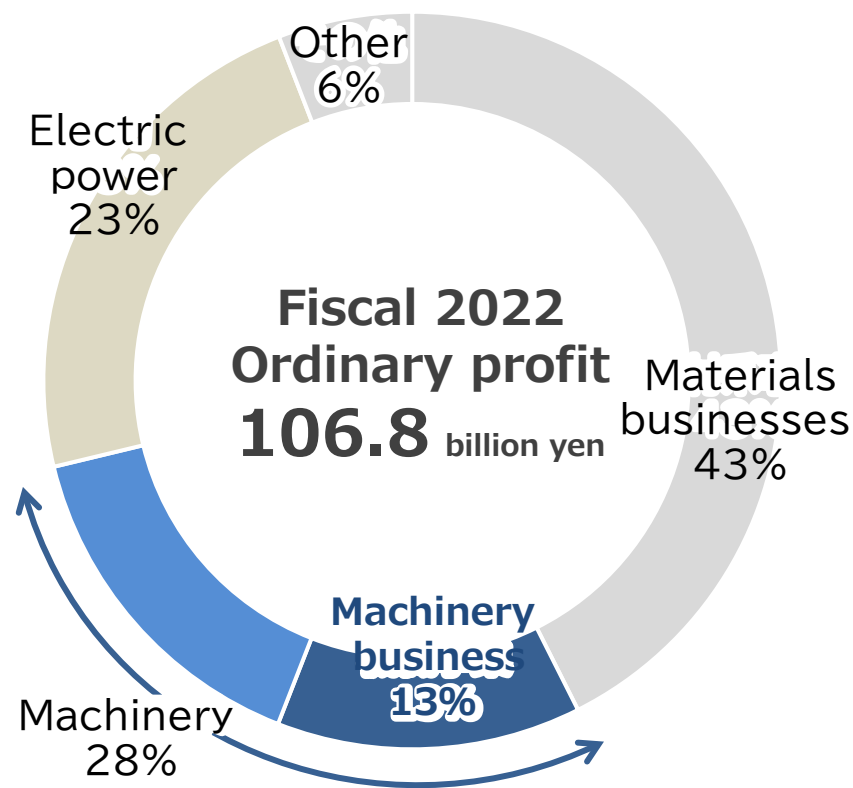
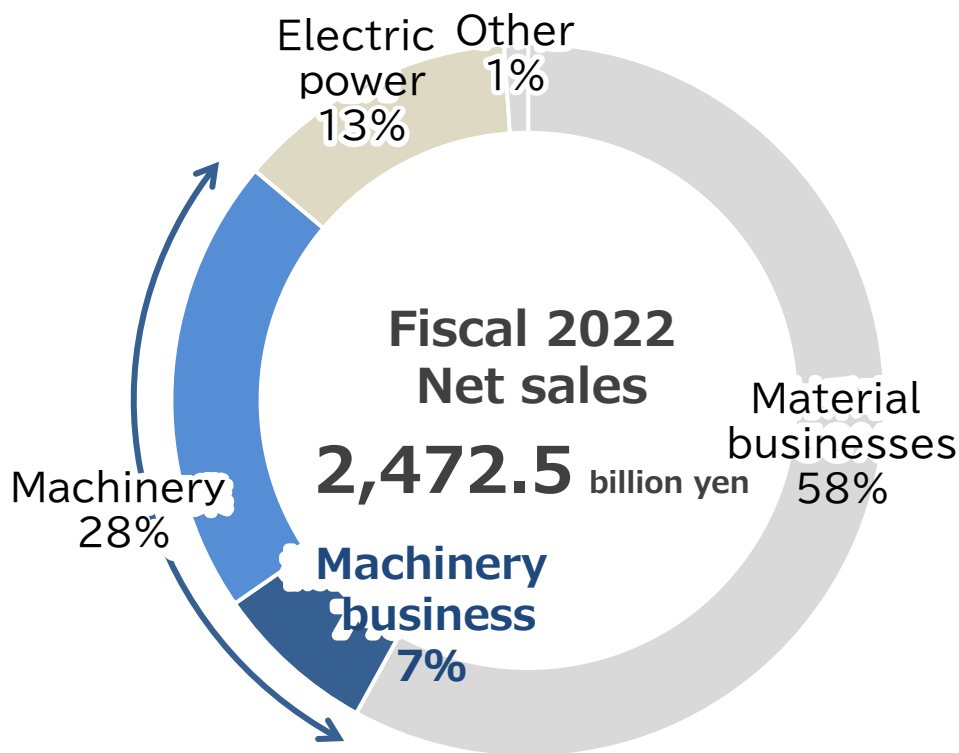
Kobelco Construction Machinery

Jun. 2022
Press Release

Press release

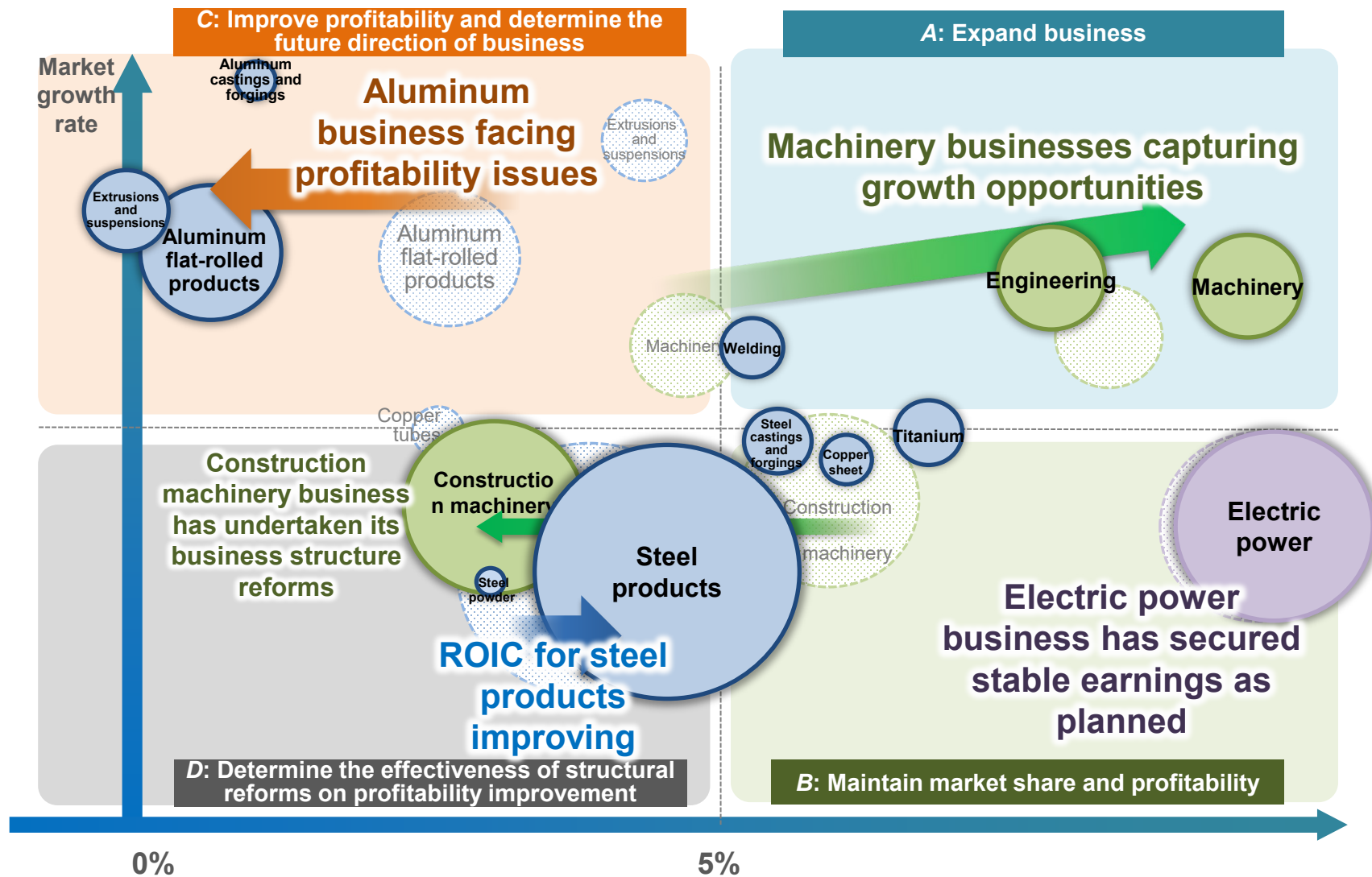
- The machinery segment is one of the Kobelco Group's core businesses, accounting for approximately 7% of consolidated net sales and 13% of consolidated ordinary profit.

Machinery Business in fiscal 2022 financial results



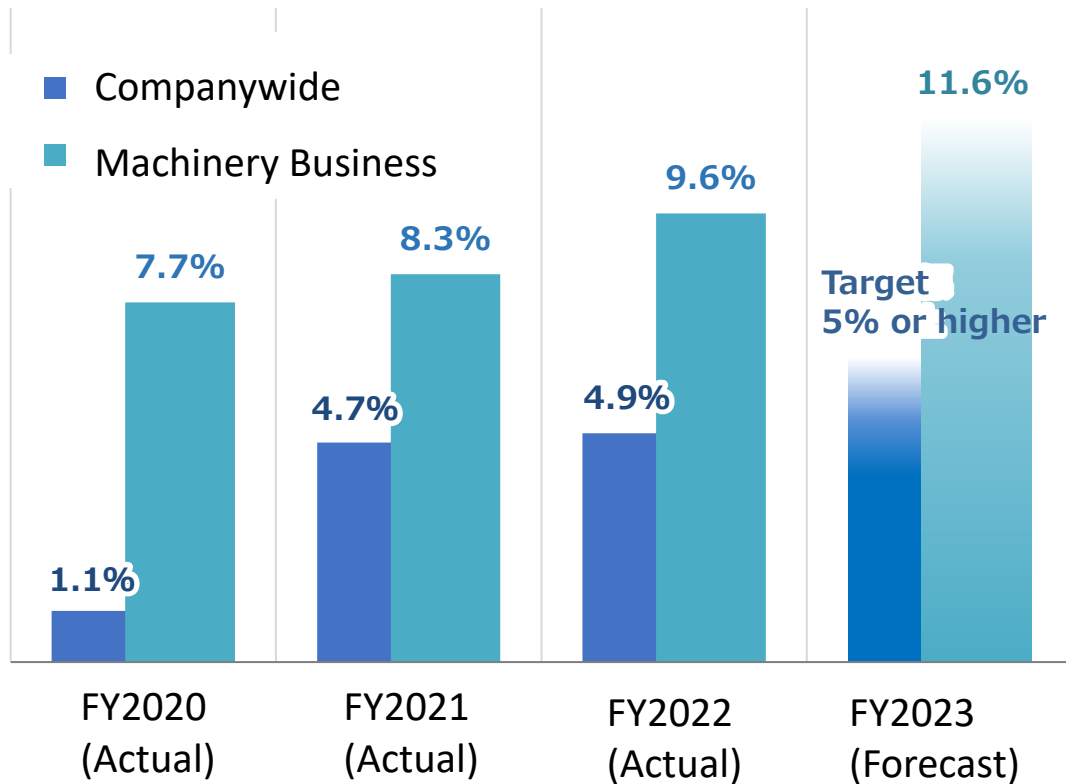
Business portfolio (Forecast for fiscal 2023)

⊙ : Assumptions for fiscal 2023 when the Medium-Term Management Plan was drawn up



- Machinery Businesses has already achieved KOBELCO Group ROIC target of 8% in fiscal 2021. We will steadily capture growing markets while maintaining the current level of ROIC.

Machinery Business ROIC trend



Target under the Medium-Term Management Plan

Vision of KOBELCO

Solving social issues and creating economic value through business activities



Toward KOBELCO that stably achieves
ROIC of 8% or higher
 and grows sustainably

Main Business Sectors

- Our machinery business began with the sale of air compressors in 1915 and has continued for over a century.
- Provides reliable machinery, equipment, and services that support industrial infrastructure mainly in three sectors: Energy and chemical, general industrial, and new sectors.

Energy and chemical sectors

Oil & gas, petrochemicals, electric power



Non-standard compressors

Heat exchangers/vaporizers

Plastic mixing and pelletizing systems

General industrial sector

Automobile-related, plant utilities iron and steel, nonferrous metals



Rubber mixers

Standard compressors

Rolling Mill

New sectors

Ceramics, semiconductors, etc.



Isostatic pressing equipment

Semiconductor testing system

Coating equipment

Reliable machinery, equipment, and services supporting industrial infrastructure

Our Technologies and Products

- We have a wide-ranging product lineup that draws on Kobelco Group's core technologies.
- Leveraging distinctive technologies, our products hold large market shares in respective fields.

Screw compressors



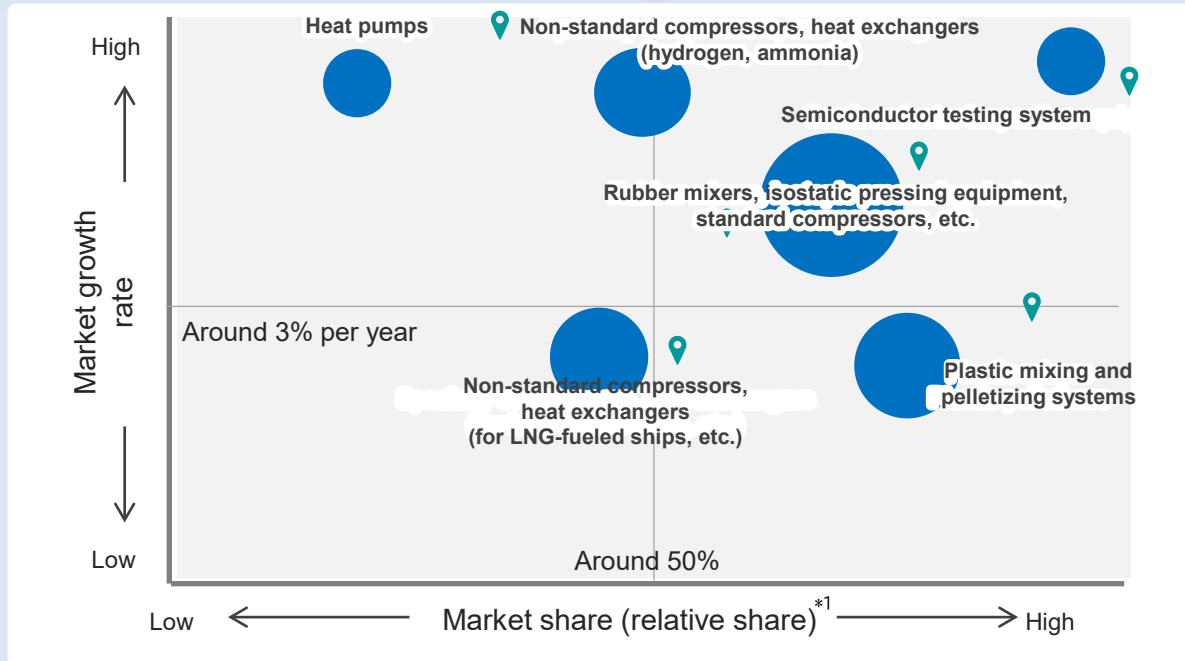
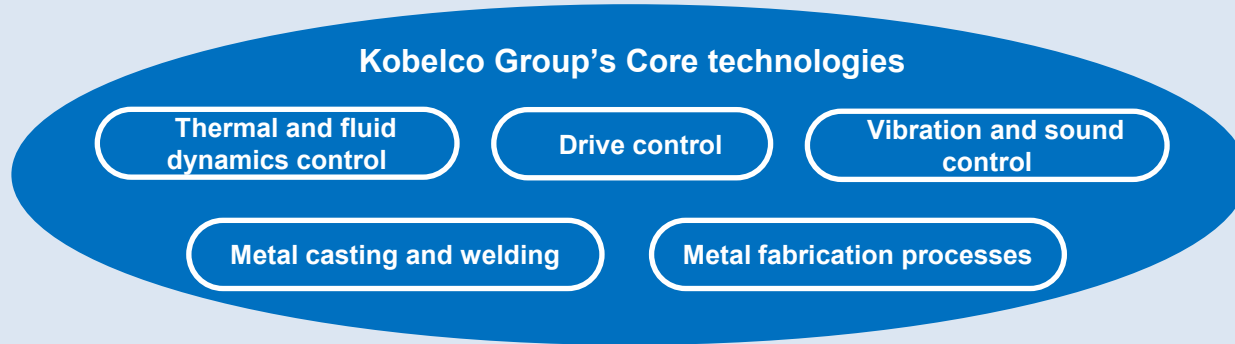
Kobelco Compressors Corporation

High global share in oil-free type

LNG vaporizers



Largest global share



Semiconductor testing system



Kobelco Research Institute, Inc.*2

Largest global share^{*3}

Isostatic pressing equipment



Quintus TECHNOLOGIES

Largest global share

Plastic mixing and pelletizing systems



Largest share in large systems for polyethylene

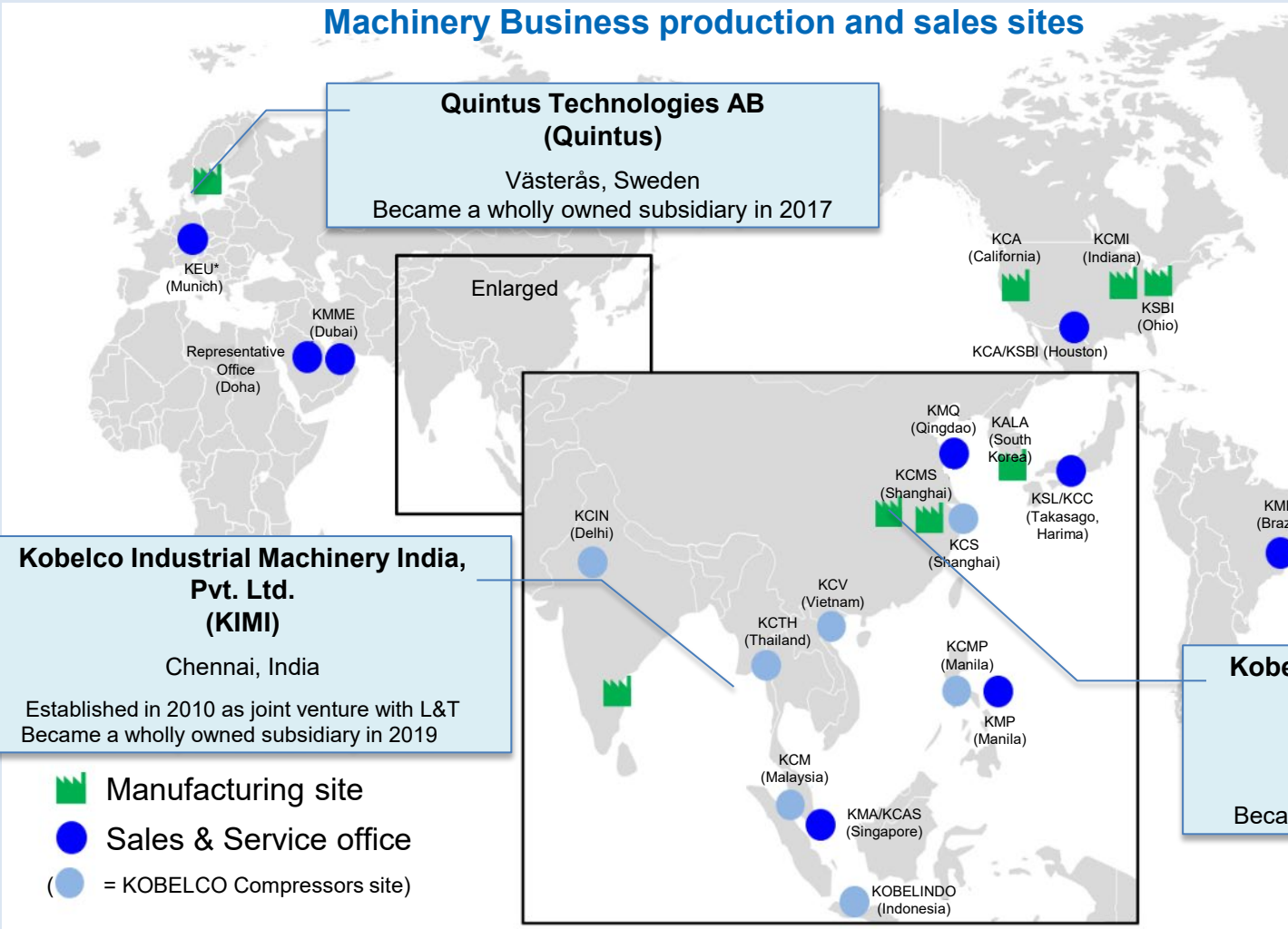
*1 Market shares are all based on our own surveys.

*2 Kobelco Research Institute became part of the machinery segment in fiscal 2023.

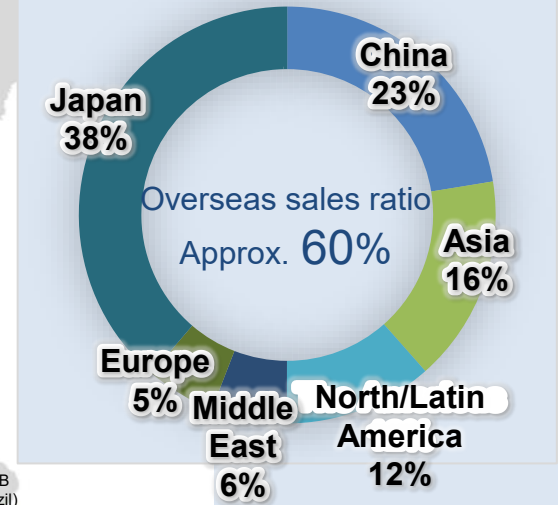
*3 Bare silicon wafer inspection equipment (edge shape measurement, warp thickness measurement)

- Starting with the establishment of production and sales sites in North America in the late 1980s, we expanded operations in various countries.
- Today we have domestic manufacturing sites in Takasago and Harima in Hyogo, Japan, and 34 overseas sites in 15 countries.

Machinery Business production and sales sites



FY2022 consolidated net sales ratio by region

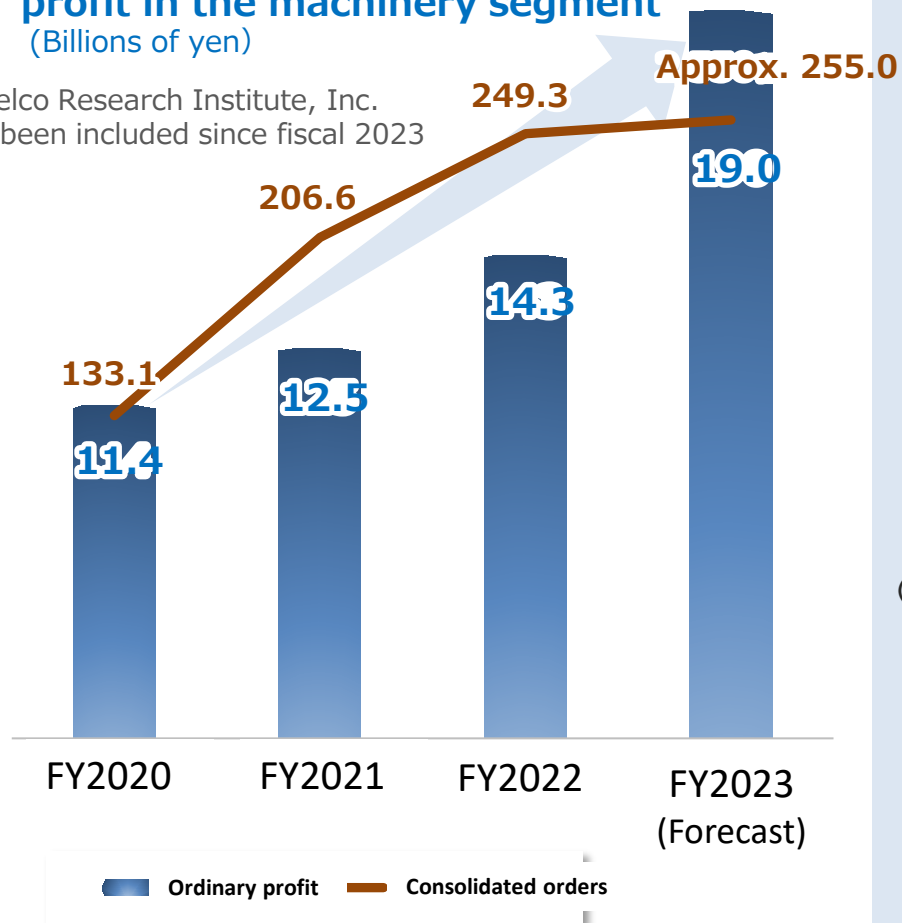


- We aim for further growth that exceeds record-high consolidated orders in fiscal 2022.

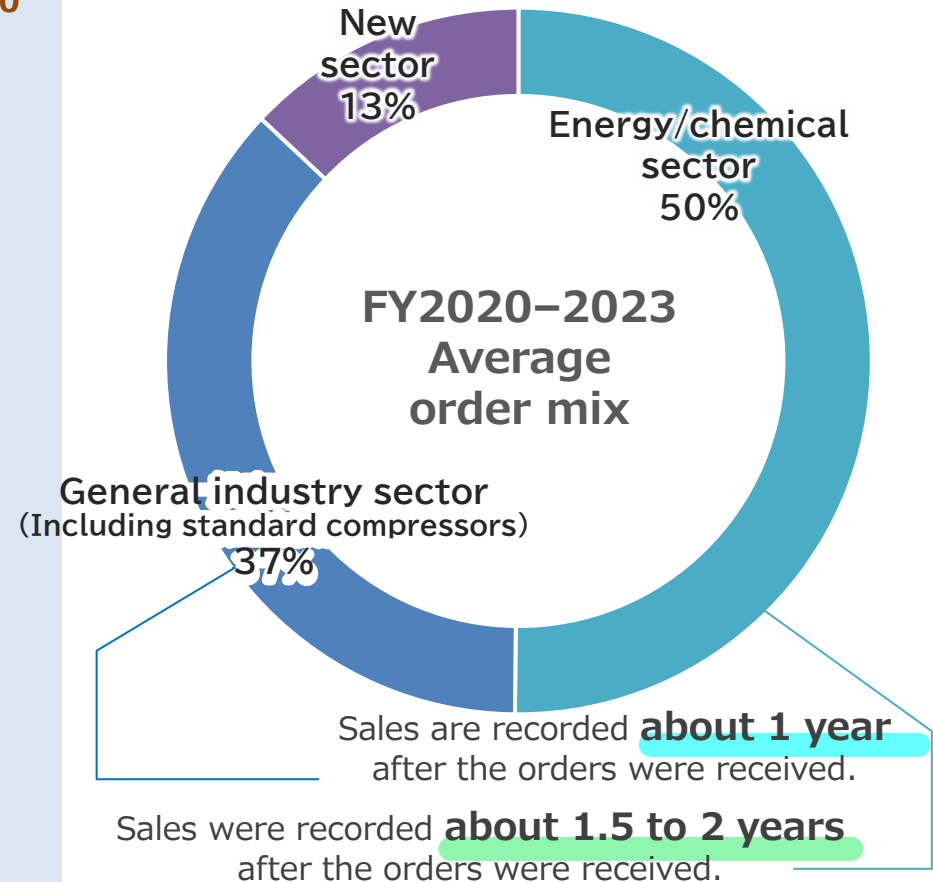
Consolidated orders and ordinary profit in the machinery segment

(Billions of yen)

Kobelco Research Institute, Inc. has been included since fiscal 2023



Status of orders by sector



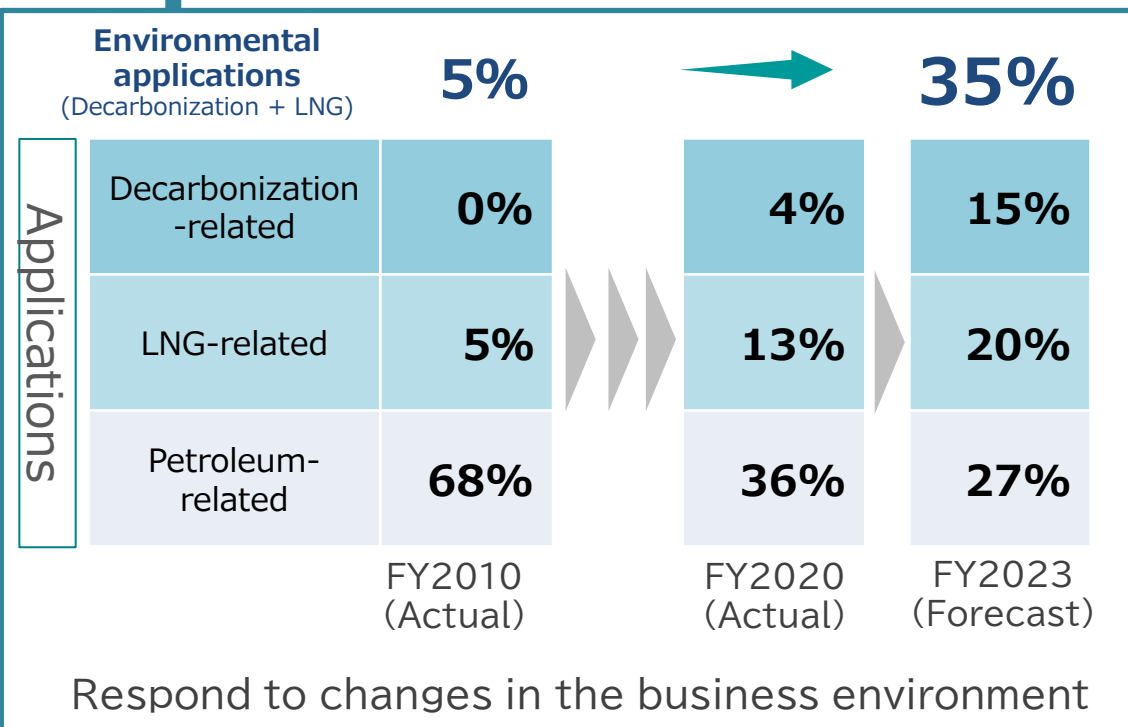
- Aim to steadily expand applications in key areas of focus by responding to changes in the business environment.
- Parts and maintenance businesses account for approximately 30% of total sales, constituting a stable source of earnings.

Main applications in the energy/chemical sector

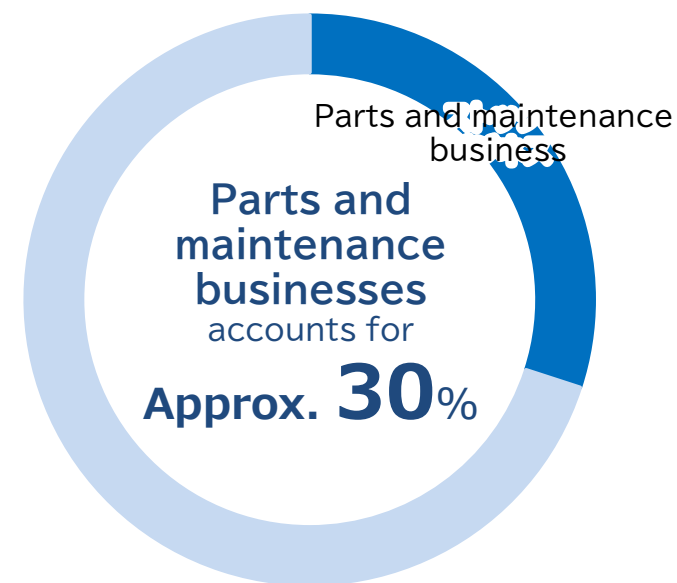
Energy/chemical

General industry

New sectors



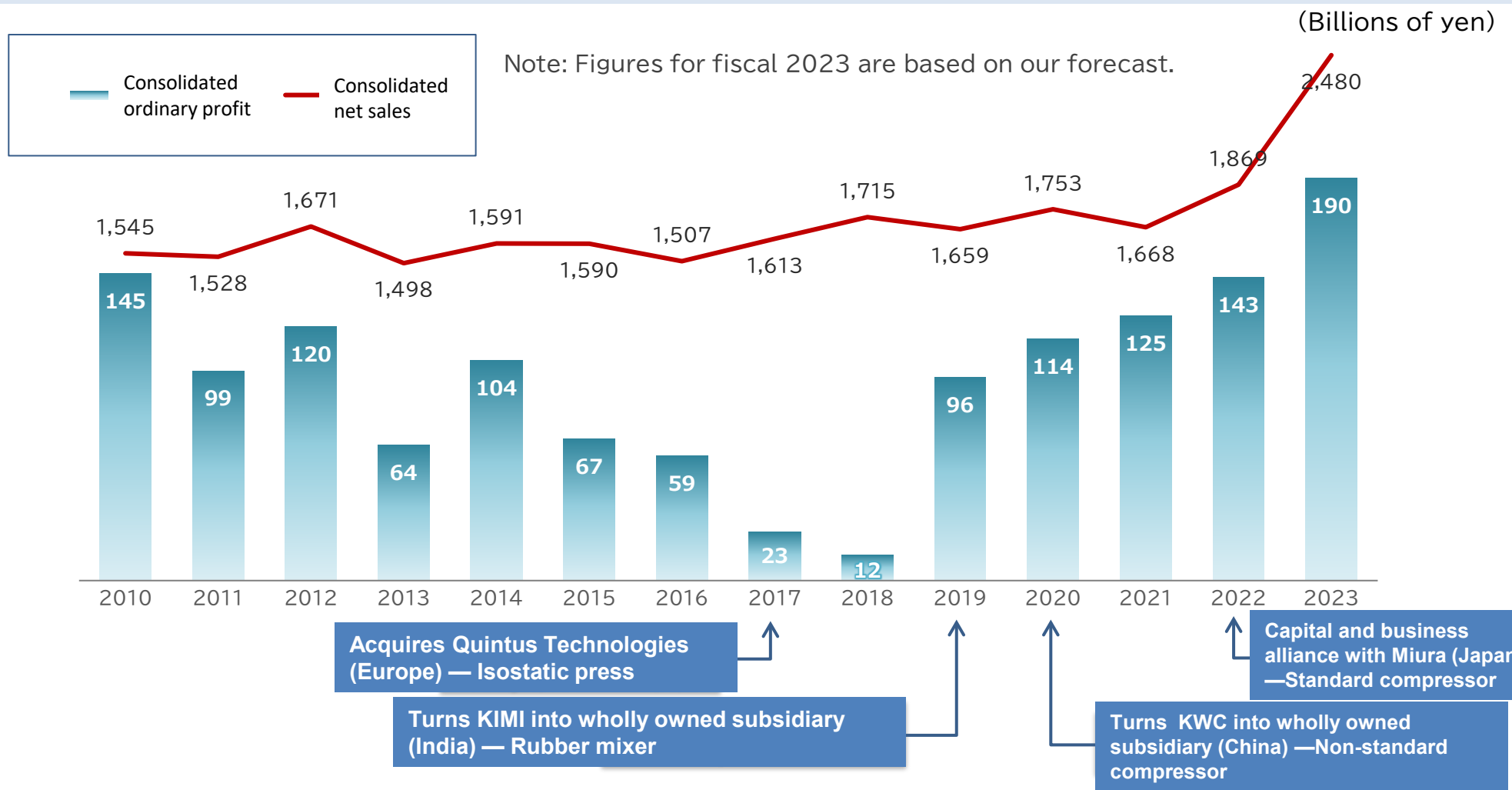
Percentage of parts and maintenance businesses



A revenue source that can be maintained even if the business environment changes

Financial Performance Trend

- Since 2017, we have pursued M&A to expand earnings and scale of business and promote globalization.
- Following a period of sluggish business performance, we took measures to be a leaner business entity such as strengthening our cost management system.
- In recent years, we have been achieving ordinary profit exceeding 10 billion yen on a steady basis.



Kobelco Group Initiatives in the Machinery Business

1. About the Machinery Business
 2. Machinery Business's Direction for the Future and Key Issues
 3. Initiatives for Key Issues
- 



Opportunities for the Machinery Business to achieve further growth

While maintaining profitability, we aim to develop the business to 300-billion-yen scale by 2030

Required conditions

- Market growth potential → See P.15-16
- Accessibility to growing markets → See P.15-16
- Making the best use of enhanced advantages and earning power

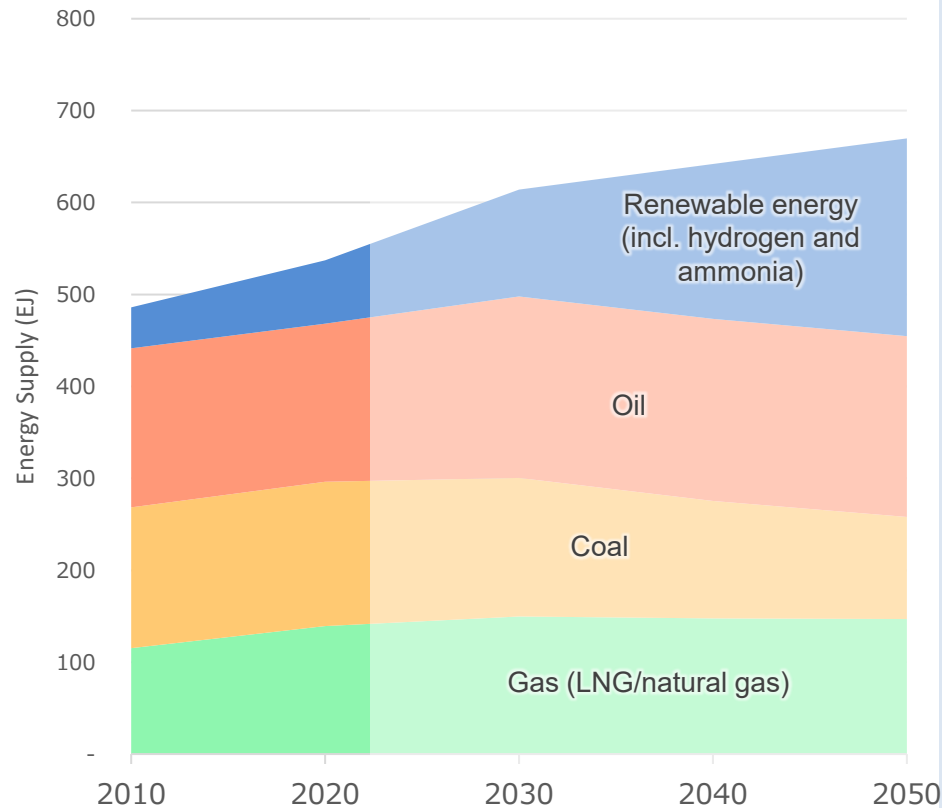
Key issues

- 1) Stabilizing earnings → See P.17
- 2) Responding to growing markets

- In the energy market, while fossil energy is shrinking, the shift to green energy is progressing. An increase in overall demand is expected.
- Investment is expected to increase in carbon capture, along with LNG/renewable energy.
- The timeline for energy transition remains uncertain, but our existing businesses have the potential to enter the markets (market accessibility) in any of the possible scenarios.

Energy market forecast

- Prepared internally based on the STEPS (Stated Policies Scenario) in the IEA World Energy Outlook 2022. - (excluding nuclear and traditional use of biomass)



Changes in future demand and technologies

- Steady demand for LNG expected to continue
- Demand for hydrogen and ammonia (carbon neutral energy sources) expected to increase
- Use of CO₂ expected to increase due to practical application and spread of carbon capture



Prospective products



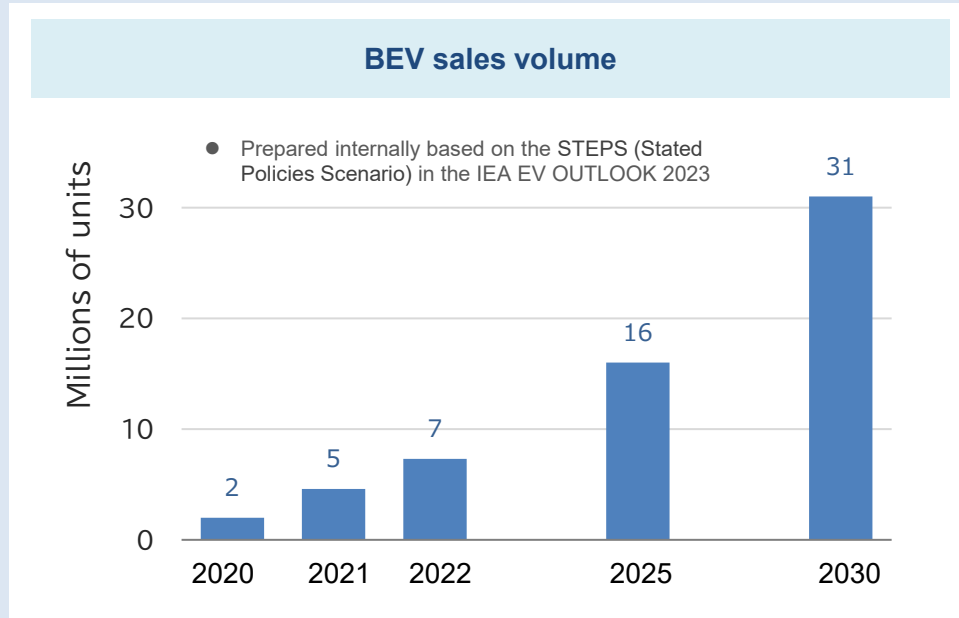
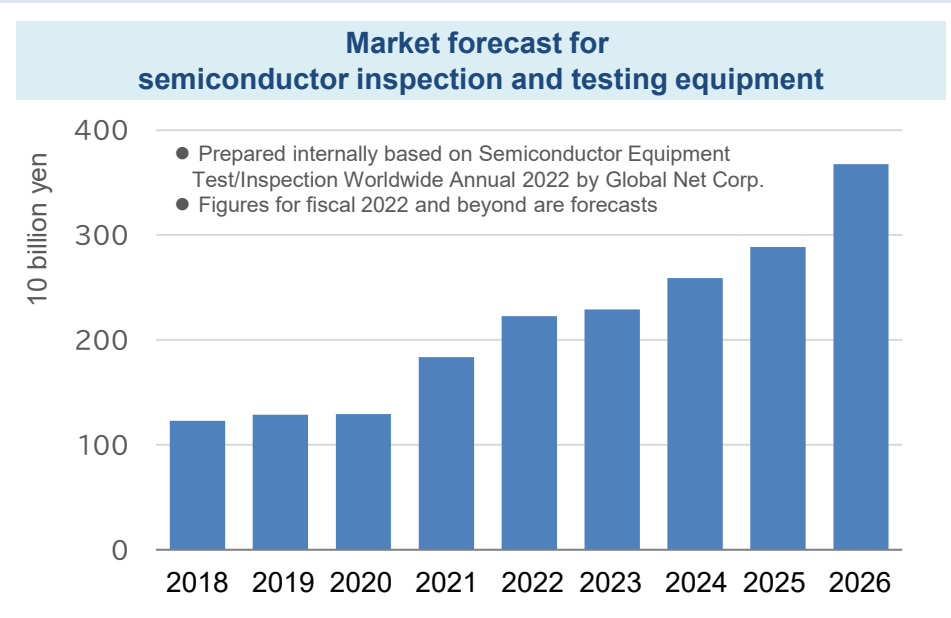
Non-standard compressors



Heat exchangers/vaporizers

- Along with the long-term growth of the semiconductor market, the demand for semiconductor testing system (of which we hold the largest market share) is expected to expand.
- In automobile production, the ratio of EVs is expected to increase. Along with a growing need for all-solid-state batteries* for EVs, the use of isostatic pressing equipment is expected in their production process.

*Making the electrolyte all-solid will have the benefits of greater capacity, improved safety, and higher output.



Future demand changes

- Increased demand for semiconductors is boosting demand for manufacturing and inspection equipment

Prospective products

Semiconductor testing system

Future technology changes

- Practical application of all-solid-state batteries
→ Expansion of needs

Prospective products

Isostatic pressing equipment

Key issues

- 1) **Stabilize earnings** : Further strengthen the ongoing efforts to stabilize earnings
- 2) **Respond to growing markets** : Enhance profitability by accelerating the response to growing markets and take steps to create new businesses

Strengthen

1) Stabilize earnings

- ① Digitalize manufacturing process and improve productivity
- ② Promote collaboration with overseas bases and Group companies In progress
- ③ Expand overseas parts and maintenance business In progress

Accelerate

2) Respond to growing markets

- ④ Respond to energy transition In progress
- **Create new businesses** (in the semiconductor/carbon neutrality-related sectors)
Details to be specified in the next medium-term plan In progress

Strengthen earnings base

Enhance profitability

Take on challenges

- As a first step, we will allocate resources to business divisions on a performance basis to increase earnings and aim to achieve business growth, while maintaining profitability.
- In the next step, we will make upfront investment to create new businesses for the future.

Kobelco Group Initiatives in the Machinery Business

- 1. About the Machinery Business**
 - 2. Machinery Business's Direction for the Future and Key Issues**
 - 3. Initiatives for Key Issues**
- 

Strengthening earnings base ① Digitize manufacturing process and improve productivity

- In non-standard products, there are issues of undocumented implicit knowledge in manufacturing processes and the tendency to seek partial optimization in information transfer/sharing.
- Undertak reforms aimed at raising productivity by **30 percent** by streamlining business operations in manufacturing processes, standardizing product design and structures, and formalize implicit knowledge.

- **Partially optimized** information transfer and sharing
- **Customized design** by overall adjustment
- **Implicit knowledge**, depending on the know-how of veteran designers

Digitalization
Standardization
Formalization of
implicit knowledge

- **Utilize digital technology** for efficient information sharing
- Standardize **design concepts and structures**
- Derive **formal knowledge** from know-how/practical knowledge

Illustration of customized design

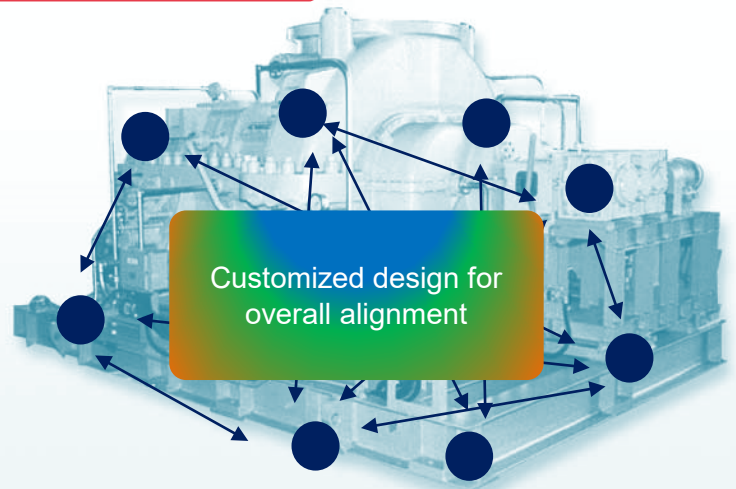
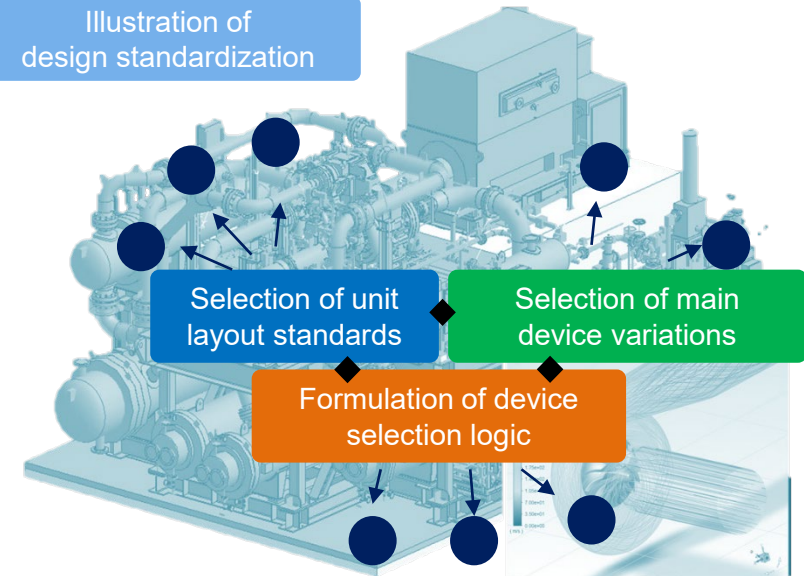


Illustration of design standardization



Strengthening earnings base

② Promote collaboration with overseas bases and Group companies

- Continue with strategic investments in overseas sites in growth sectors and markets
- Aimed at expanding overseas parts and maintenance business, improve customers support by leveraging the network of overseas sites and digital technologies

Enhancing profitability

③ Expand overseas parts and maintenance business

Europe

- Conduct marketing on the front lines of environmental business

China

- ★ Achieve local production for local consumption at each production site
- ★ Promote local sales strategy

Middle East and Asia

- ★ Boost customer support in giant markets
- Train foreign national engineers
- Make effective use of manufacturing sites in India and South Korea

North/Latin America

- Conduct marketing on the front lines of environmental business, and work to have our technologies integrated into customer specifications
- ★ Boost customer support in North America

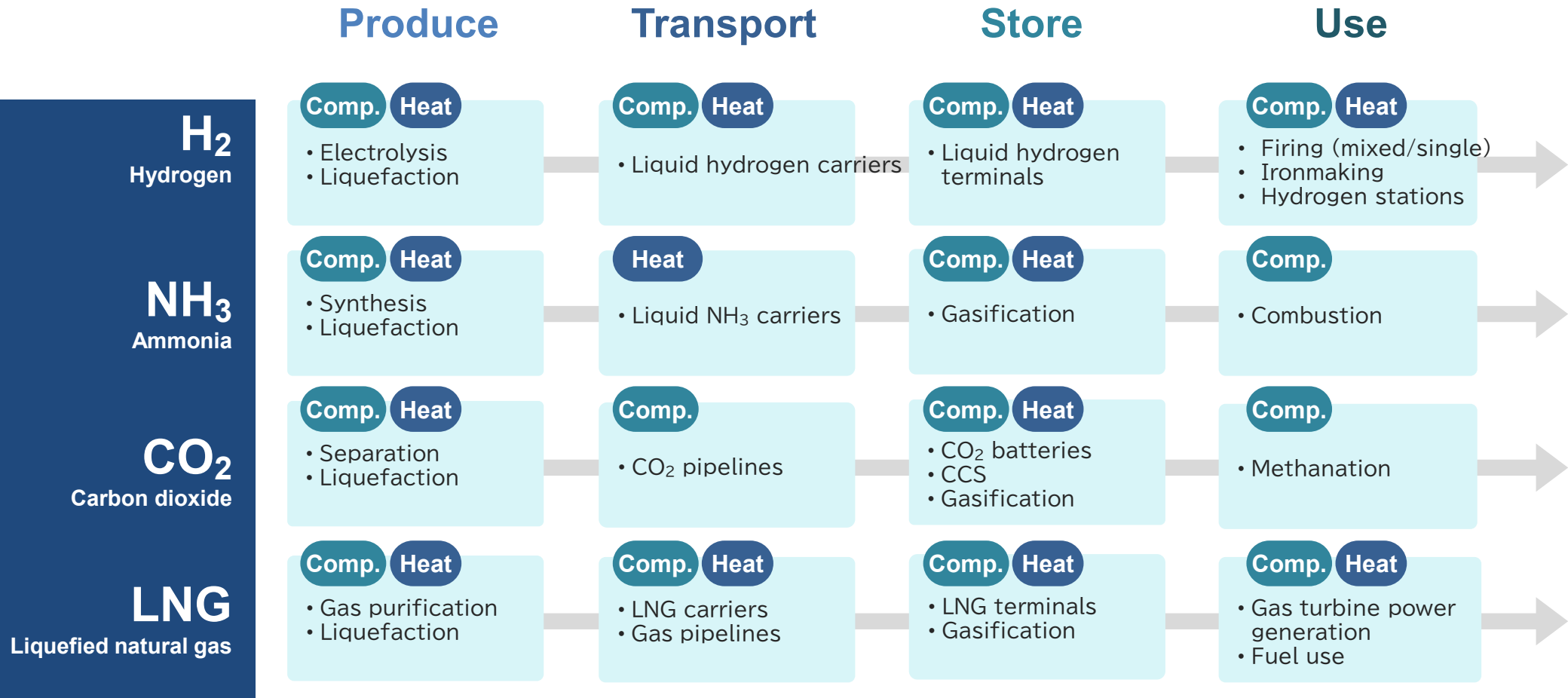
Japan

- Support overseas production sites as mother factory
- Strengthen synergy with Miura Co., Ltd.
- ★ Boost response speed with digitalization

- ★ Measures for strengthening parts and maintenance business
- Regional core base

Enhance profitability ④ Respond to energy transition

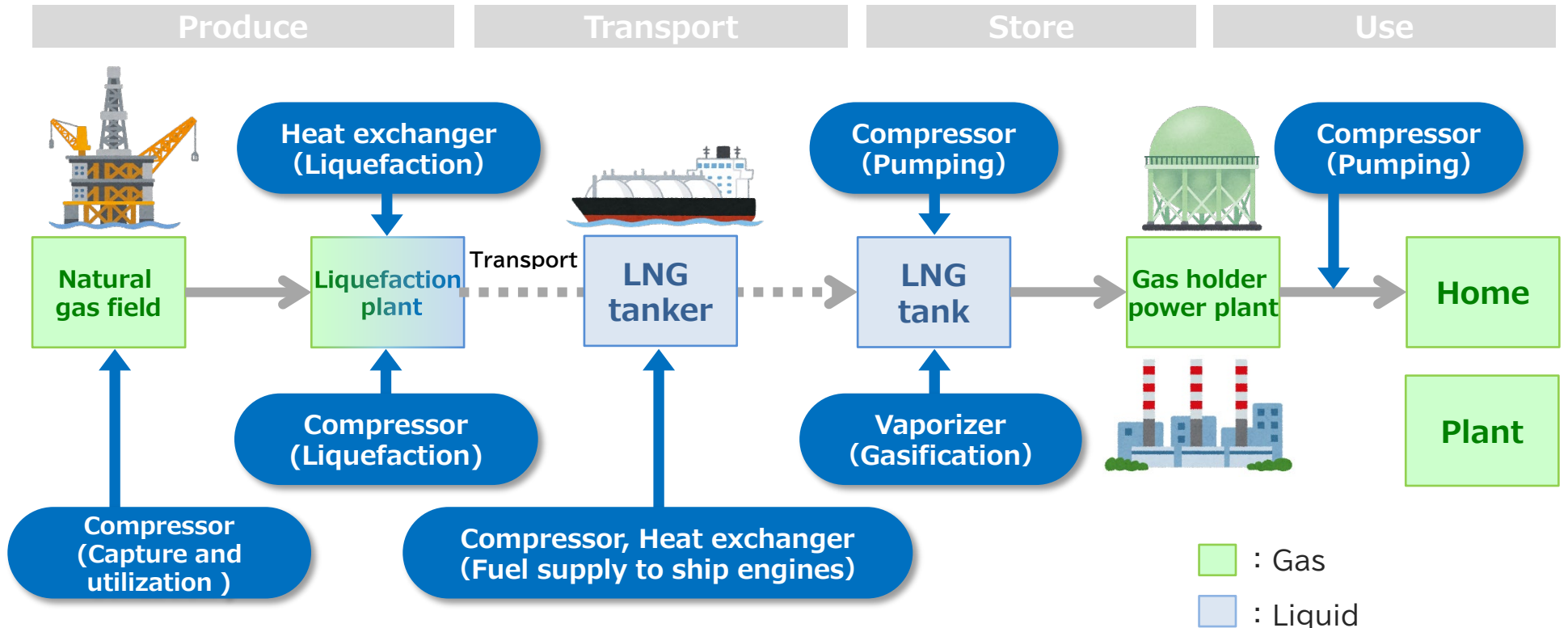
- In the machinery business, compressors, heat exchangers, and vaporizers are expected to be used in every part of the supply chain of the energy conversion industry, contributing to the creation of a carbon neutral society.



Enhance profitability ④ Respond to energy transition

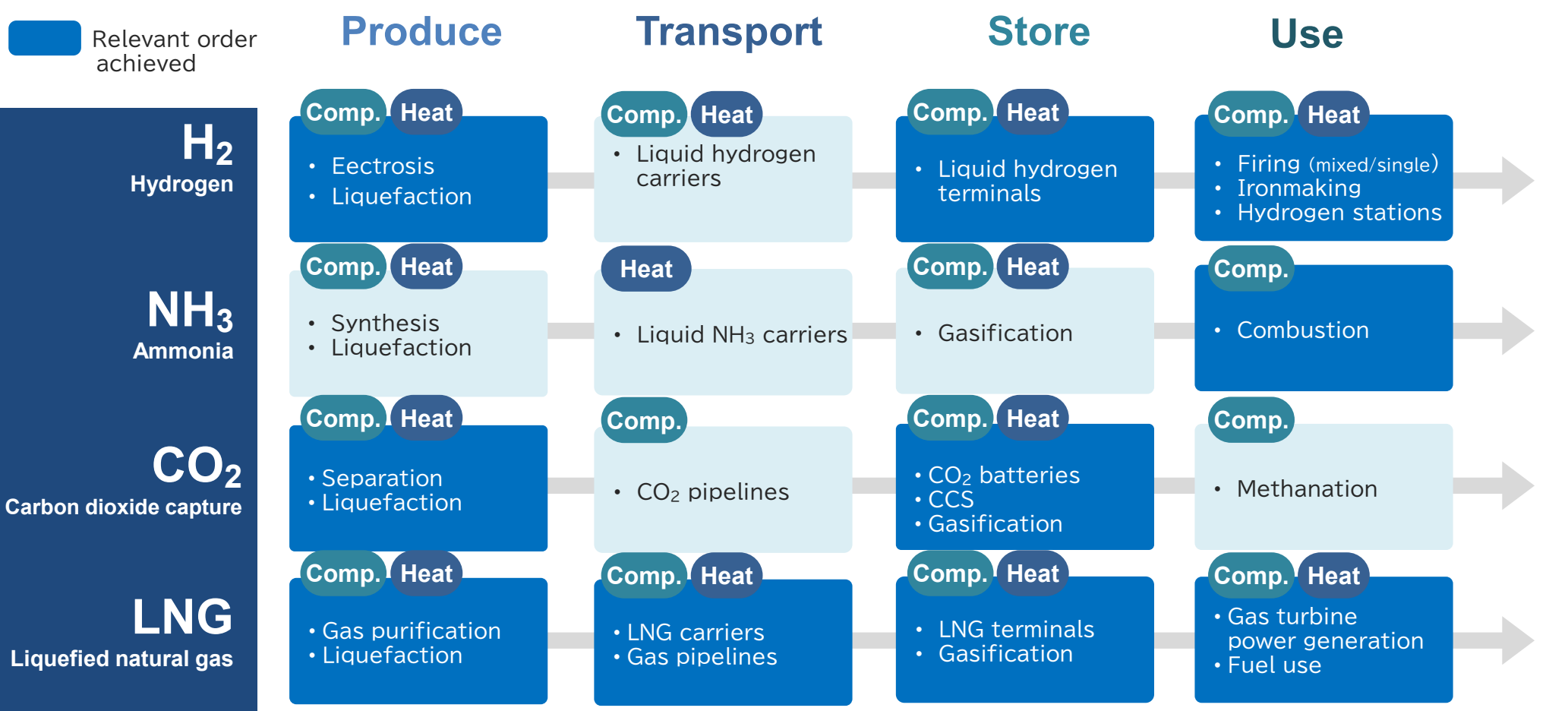
Natural gas and other gases must be converted into an easy-to-handle form (gas or liquid) at each stage of the supply chain before use. Compression and vaporization are also required for use. Compressors, heat exchangers, and vaporizers are essential in every part of the supply chain.

An example of use of the compressor, heat exchanger, and vaporizer in the natural gas supply chain



Enhance profitability ④ Respond to energy transition

- Our Company has an extensive track record as a supplier of LNG-related products. We plan to apply its proven technology to hydrogen, ammonia and CO₂ recovery applications.
- We also accept orders and offer quotations for new environmental applications in a bid to head into new fields.

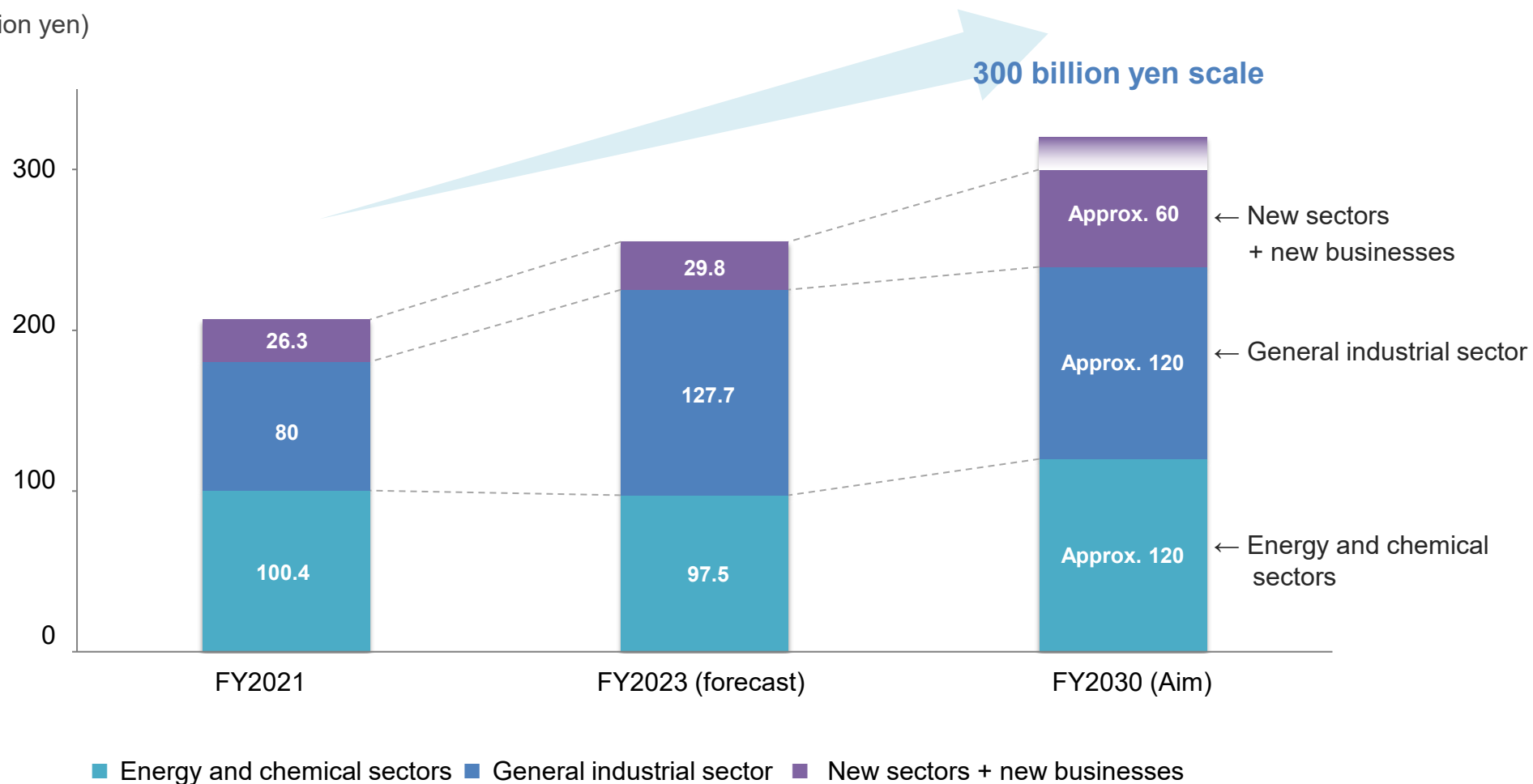


Comp. : Compressors

Heat : Heat exchangers and vaporizers

- Aim to expand the business scale to 300 billion yen while maintaining profitability by expanding the scale of the energy and chemical sectors and creating/developing new businesses through investment in strategic M&A, etc.

(Billion yen)



Main Points of Today's Presentation

About the Machinery Business

- The Machinery Business is one of the core segments, accounting for 13% of the consolidated ordinary profit of the Kobelco Group (based on actual results for fiscal 2022).
- Provides equipment and services that support industrial infrastructure in three sectors: energy and chemical, general industrial, and new sectors
- Our strengths are having products with a large market share, operating business globally, being responsive to market changes, and earning power from parts and maintenance business.

Direction for the future and priority issues of the Machinery Business

- In the future, there will be an increase in demand for “energy transition and resource recycling” and for “electronics and semiconductors.” The Machinery Business has the potential to enter these growth markets and capture business opportunities.
- Making maximum use of the earning power and market superiority that have been built up over the years, we will strengthen and accelerate our response to growth markets, including stabilization of earnings and creation of new businesses.
- Specifically, initiatives will be focused on the priority issues of “digitalizing manufacturing processes and raising productivity,” “further promoting collaboration with overseas bases and Group companies,” “expanding overseas parts and maintenance business,” and “responding to energy transition.”
- While maintaining profitability, we will aim for growth to **a business scale of 300 billion yen by 2030** by expanding the energy and chemical sectors + capturing demand growth in the semiconductor sector, as well as creating new businesses.

Group Corporate Philosophy

<h2>KOBELCO's View of the Future</h2>	<p>Our view of a society and future to be attained as we carry out KOBELCO's mission</p> <p>We envision a world in which people, now and in the future, can fulfill their hopes and dreams while enjoying safe, secure, and prosperous lives.</p>
<h2>KOBELCO's Mission</h2>	<p>Our mission and the social significance of the KOBELCO Group that we must fulfill</p> <p>Our mission is to provide solutions to the needs of society, by making the best use of the talents of our employees and our technologies.</p>
<h2>Core Values of KOBELCO</h2>	<p>The commitments of the KOBELCO Group to society and the values shared by the entire KOBELCO Group</p> <ol style="list-style-type: none"> 1. We provide technologies, products and services that win the trust and confidence of our customers we serve and the society in which we live. 2. We value, and support the growth of, each employee on an individual basis, while creating a cooperative and harmonious environment. 3. Through continuous and innovative changes, we create new values for the society of which we are a member.
<h2>Six Pledges of KOBELCO</h2>	<p>Code of Conduct for all Group employees to follow to fulfill the Core Values of KOBELCO and the Quality Charter</p> <ol style="list-style-type: none"> 1. Uphold the Highest Sense of Ethics and Professionalism 2. Contribute to the Society by Providing Superior Products and Services Quality Charter 3. Establish a Comfortable but Challenging Work Environment 4. Live in Harmony with the Local Community 5. Contribute to a Sustainable Environment 6. Respect Each Stakeholder

Cautionary statement

- Certain statements in this presentation contain forward-looking statements concerning forecasts, assertions, prospects, intentions and strategies. The decisions and assumptions leading to these statements are based on information currently available to Kobe Steel. Due to possible changes in decisions and assumptions, future business operation, and internal and external conditions, actual results may differ materially from the projected forward-looking statements. Kobe Steel is not obligated to revise the forward-looking contents of this presentation.
- Uncertain and variable factors include, but are not limited to:
 - Changes in economic outlook, demand and market conditions
 - Political situation and trade and other regulations
 - Changes in currency exchange rates
 - Availability and market conditions of raw materials
 - Products and services of competing companies, pricing policy, alliances, and business development including M&As
 - Strategy changes of alliance partners

KOBELCO

Announcements and event schedules



Announcements and event schedules

Date : May 22, 2023
Announced on the Company's official website

Contents

- ✓ DX strategy roadmap
- ✓ Examples of initiatives underway



Machinery Business Seminar

Date: July 6, 2023 (p.m.)
Held online

Contents

- ✓ Overview of the Machinery Business
- ✓ Business environment
- ✓ Vision of the Machinery Business for the future



(Tentative title) KOBELCO ESG DAY

Date : September 27, 2023
(All day)
To be held online

Contents

- ✓ ESG seminar
- ✓ Panel discussion with outside directors
- ✓ Initiatives undertaken by business divisions (Kobelco Construction Machinery, Engineering Business)