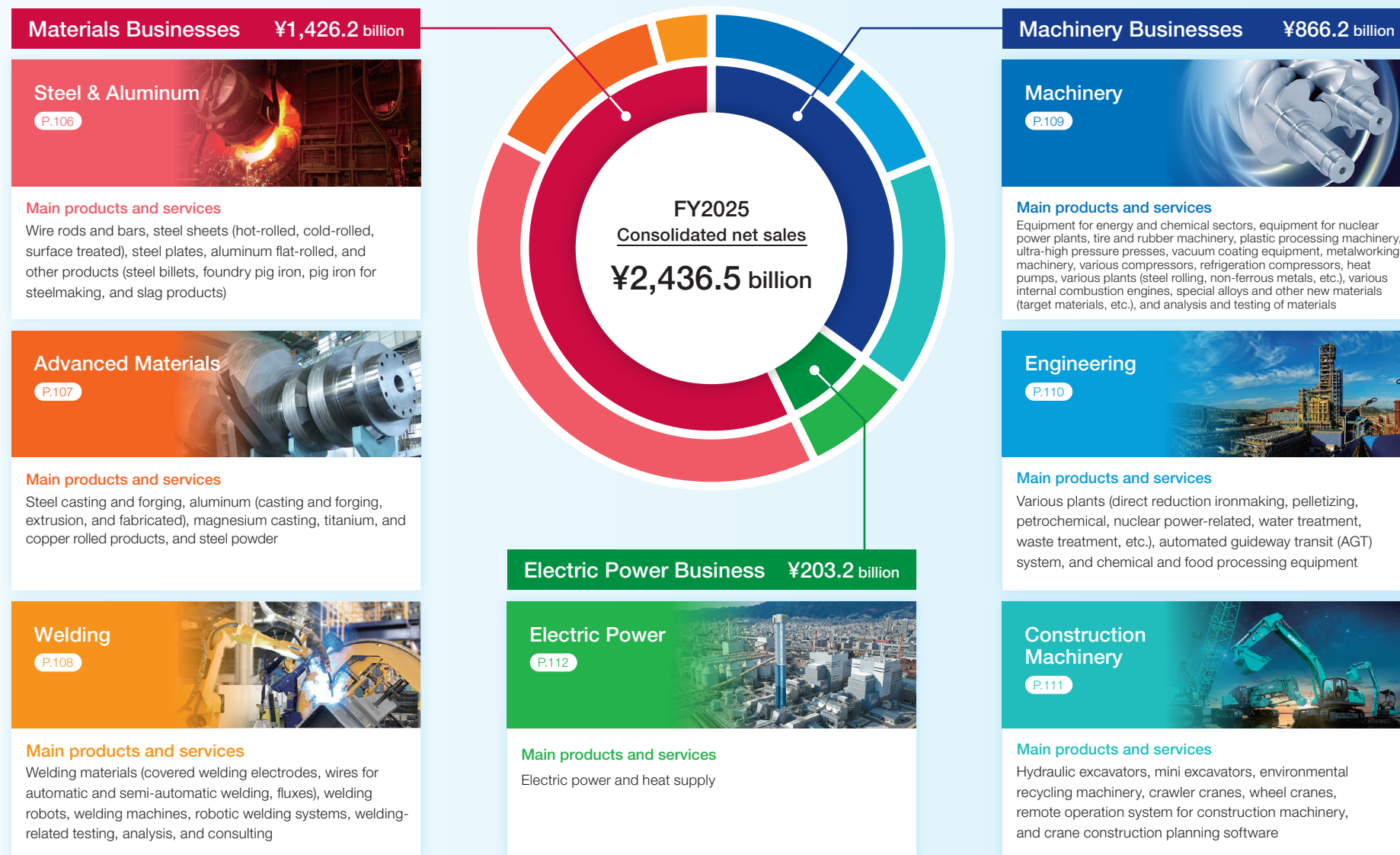




01

Kobelco Group's
Value Creation

Overview of the Kobelco Group



Note: Consolidated net sales for fiscal 2025 include 5.8 billion yen from other businesses.

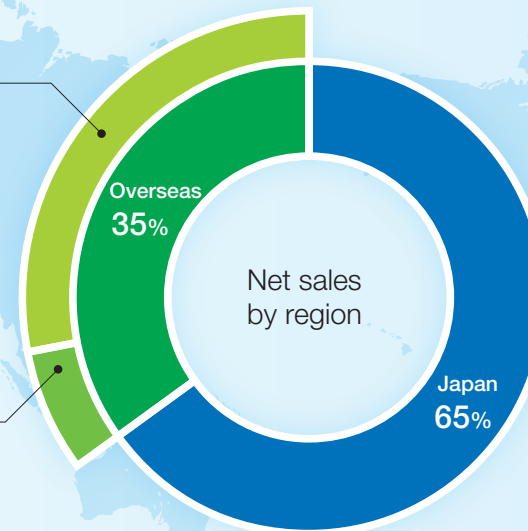
Overview of the Kobelco Group

Finance

Capital ¥250.9 billion	Net sales ¥2,436.5 billion	Total assets ¥2,865.1 billion
Capital investment (payment basis) ¥124.4 billion	Non-current assets ¥1,020.9 billion	Social contribution activity expenses Approx. ¥0.9 billion

Other regions
28%

U.S.
7%



Human Resources

Number of employees (consolidated) 38,614	Global operations 24 countries	Affiliate companies 232
Percentage of employees returning from childcare leave 98.6%	Percentage of female managers 3.8%	



Technology

Research and development expenses ¥46.6 billion	Number of intellectual property rights owned 7,400	21 core technologies
Reduction of CO ₂ emissions in production processes 23% reduction (compared to FY2013)	Contribution to reduction of CO ₂ emissions through technologies, products, and services 67.42 million tons	By-product recycling rate 98.4%

History of the Kobelco Group

Kobe Steel's origin dates back to September 1, 1905, when the general partnership trading company Suzuki & Co. (Suzuki Shoten) acquired a steel business in Wakinohama, Kobe, called Kobayashi Steel Works (Kobayashi Seikoshō) and changed its name to Kobe Steel (Kobe Seikoshō). Over the 120 years since its founding, we have consistently strived to overcome numerous challenges while remaining committed to providing solutions to the diverse needs of society.

Note: All years and months in this timeline are given in calendar years.

1905–

Venturing into various business sectors to foster Japan's industrial independence

Suzuki Shoten, the predecessor of Kobe Steel, worked to establish domestic production of industrial products that Japan depended on importing, with the corporate philosophy of "enhancing national interests." Kobe Steel, with the mission of contributing to the independence of Japanese industry in the heavy industry sector, introduced many of Japan's first domestically produced products not only in steel—its founding business—but also in the machinery, non-ferrous metals, engineering, and construction machinery businesses, while expanding its business reach in these areas.

Kobe Steel faced significant challenges, including the threat of closure during its early days, the recession that followed World War I, and the bankruptcy of Suzuki Shoten. Despite these adversities, the Company persisted and continued to explore new business opportunities.

During this period since its founding, the Company formed the foundations for its diverse business operations today.

Groupwide

1905 Founded



Company building in the early days

Materials businesses

1905 Begins steel casting and forging business

1916 Begins steel products business

1917 Begins copper business

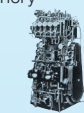
1937 Begins aluminum business

1940 Begins welding business
Japan's first welding electrode production

Machinery businesses

1914 Begins machinery business

Japan's first development of high-pressure air compressor



High-pressure air compressor

1926 Begins engineering business
Japan's first cement plant completed

1930 Begins construction machinery business
Japan's first electric shovel completed



Electric shovel

1945–

Post-war reconstruction and global expansion

Just three months after World War II ended, the Company resumed production of wire rods, contributing to Japan's early recovery.

During the post-war reconstruction period, we became the first company to initiate research and development of titanium in Japan in 1949, and we began industrial production in 1955. Along with this new venture business, the Company expanded its business footprint in both the materials and machinery businesses, establishing integrated steel production with the completion of its first blast furnace in Nadahama (the current Kobe Wire Rod & Bar Plant), completing Kakogawa Works, and starting the advanced urban transit system business. The Company also achieved significant milestones in its global expansion during this period. These include starting the plant export business, establishing its first overseas manufacturing base, and entering the direct reduced iron (DRI) plant business, following the acquisition of Midrex Technologies, Inc. in the United States.

1979 Establishes KOBELCO as international unified trademark

1955 Begins titanium metal business
Japan's first titanium industrial production

1959 Establishes integrated steel production



First blast furnace in Nadahama

1968 Establishes first overseas manufacturing base in Thailand (Manufacturing and sales base for covered welding electrodes)

1970 Establishes integrated steel production at Kakogawa Works

1990 Establishes manufacturing and sales base for automotive hot-dip galvanized steel sheet in the U.S.

1962 Begins overseas plant business
Japan's then-largest plant export (East Pakistan)



Fertilizer plant in East Pakistan

1975 Starts advanced urban transit system business
Begins operation of AGT system "KRT" at the Okinawa Ocean Exposition

1983 Acquires U.S. company Midrex Technologies, Inc.
Begins DRI plant business

1995-

Post-earthquake reconstruction and entry into the electric power business

In the Great Hanshin-Awaji Earthquake of 1995, our Company suffered significant damage, particularly to the blast furnace at Kobe Works (the current Kobe Wire Rod & Bar Plant). Initially, the blast furnace was expected to take six months to repair; however, it was restored in just two and a half months, becoming a symbol of Kobe City's recovery from the disastrous earthquake.

The year after the earthquake, the Company began a new venture in the wholesale power supply business, utilizing its know-how gained from in-house power generation in the steel business. In 2002, the Company started commercial operations of the Kobe Power Plant No. 1 unit. The Kobe Power Plant continues to contribute to improving the electricity self-sufficiency rate of Kobe City and the Hanshin region. With the launch of the wholesale power supply business, the Company has established a framework to provide solutions for a diverse range of customers through its three core businesses: materials, machinery and electric power.

In addition, the Company set up overseas manufacturing and sales bases for automotive applications in the United States and China, building a system to better address customer needs.

Groupwide

- 1995 The Great Hanshin-Awaji Earthquake (incurred damages of approximately 100 billion yen)



After the earthquake

Materials businesses

- 2003 Establishes manufacturing and sales base in the U.S. for aluminum forged parts for automotive suspensions
- 2004 Establishes automotive special steel wire rod processing base in China
- 2014 Establishes manufacturing and sales base for aluminum automotive panel materials in China
- 2014 Establishes manufacturing and sales base for automotive cold-rolled, high-tensile strength steel in China
- 2016 Establishes manufacturing and sales base for aluminum extrusions and fabricated products in the U.S.

Machinery businesses

- 2009 Constructs a local production base for construction machinery in India (organizational restructuring)
- 2011 Takes a stake in a company that designs, manufactures, and sells compressors in China

Electric power business

- 1996 Decides to enter wholesale power supply business
- 2002 Starts commercial operations of Kobe Power Plant No. 1 unit. Starts wholesale power supply business
- 2004 Starts commercial operations of Kobe Power Plant No. 2 unit



Kobe Power Plant No. 1 and No. 2 units

2017-

Enhancing sustainability management and transforming into an appealing company for the next 100 years

We caused a lot of problems for many people due to the quality-related misconduct that was made public in 2017. To prevent recurrence, the Company has implemented various measures and is currently carrying out Kobelco Total Quality Management (TQM) activities aimed at achieving quality that satisfies our customers. As the sustainability movement expands worldwide, the Company has further enhanced its sustainability management with a focus on the next 100 years by implementing measures, such as the formulation of a new Group Corporate Philosophy and the identification of materiality (medium- to long-term key issues).

The Company also worked to develop an optimal business portfolio by taking proactive approaches targeting growth markets, including the acquisition of Quintus Technologies in the machinery business and the successful startup of all six power plants in the electric power business.

Leveraging the collective strength of its diverse businesses, technologies, and human resources developed over its 120-year history, all Group employees are working together as Team Kobelco to achieve the transformation into an appealing company, as set out in the Kobelco Group Medium-Term Management Plan (Fiscal 2024–2026).

- 2017 Launches Next 100 Project
- 2017 Announces quality-related misconduct
→ Implementation of measures to prevent recurrence and Kobelco TQM activities
- 2020 Establishes Group Corporate Philosophy
- 2021 Identifies materiality

- 2017 Consolidates upstream processes at Kakogawa Works

- 2017 Acquires Quintus Technologies of Sweden (World's leading isostatic press manufacturer)



Quintus Technologies' isostatic pressing equipment

- 2024 Kansai Coke and Chemicals Co., Limited becomes a consolidated subsidiary
- 2025 Establishes manufacturing and sales company for aluminum sheets for automotive panels in China
- 2026 Nippon Koshuha Steel Co., Ltd. becomes a wholly owned subsidiary; transferred to Daido Steel Co., Ltd.

- 2021 Kobelco Eco-Solutions Co., Ltd. becomes wholly owned subsidiary
- 2022 Begins capital and business alliance with Miura Co., Ltd.

- 2019 Starts commercial operations of Moka Power Plant No. 1 unit
- 2020 Starts commercial operations of Moka Power Plant No. 2 unit



Moka Power Plant No. 1 and No. 2 units

- 2022 Starts commercial operations of Kobe Power Plant No. 3 unit
- 2023 Starts commercial operations of Kobe Power Plant No. 4 unit

Kobelco Group's Value Creation

Management Strategy for Value Creation

Business Foundation for Value Creation

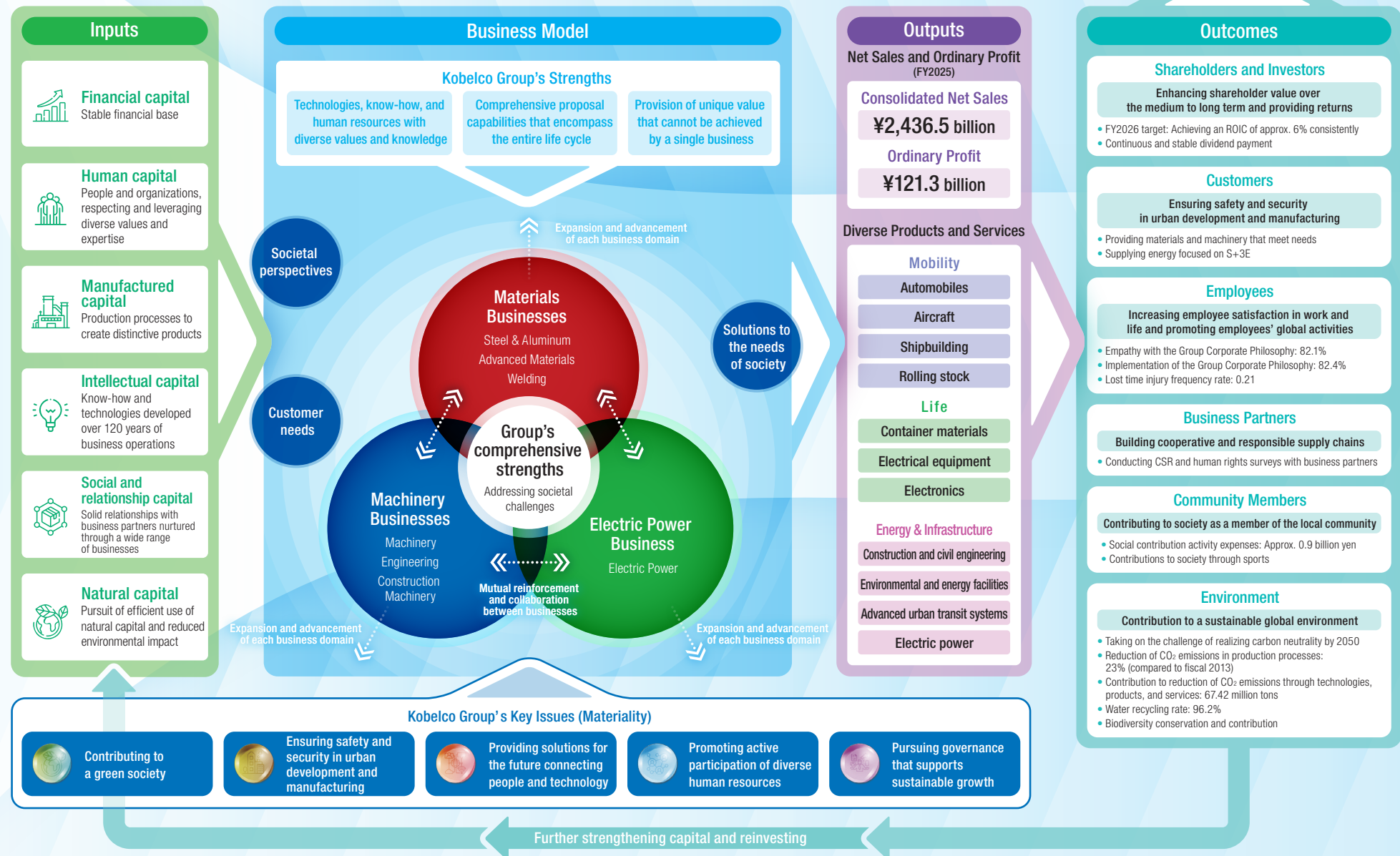
Governance for Value Creation

Operating Results by Segment

Data Section

Value Creation Process

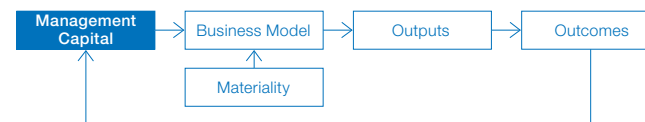
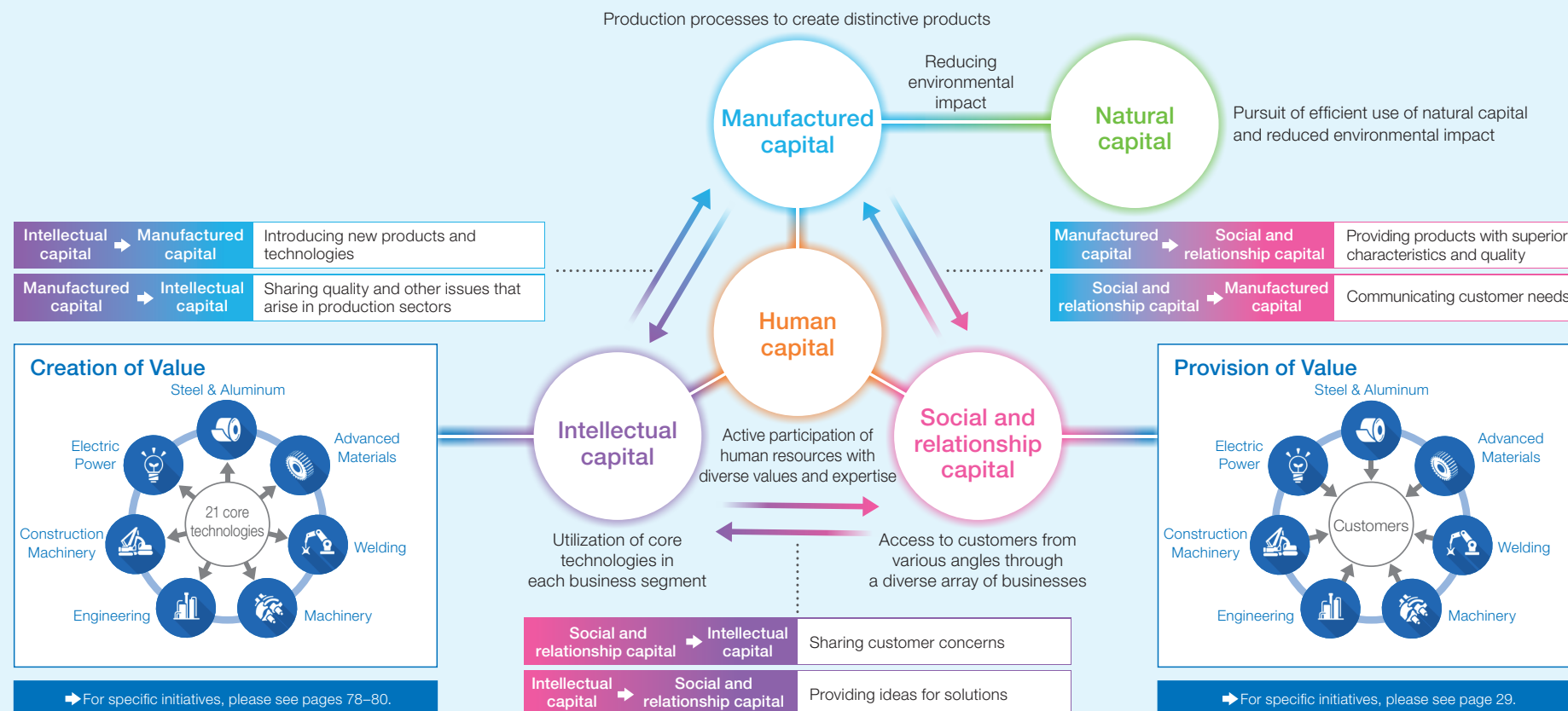
We envision a world in which people, now and in the future, can fulfill their hopes and dreams while enjoying safe, secure, and prosperous lives.



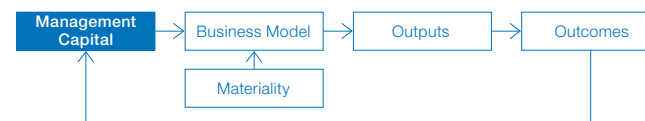
Our Management Capital

Kobelco Group's business foundation is reinforced by its human resources with diverse values and knowledge. We offer distinctive value that is unattainable by a single business alone by promoting Groupwide sharing and utilization of the know-how and expertise gained by individuals across different areas of our businesses, as well as updated information obtained from market players and customers.

In recent years, we are required to offer comprehensive solutions that consider the entire life cycle of products to address climate change and other societal demands by making more effective use of our Group's management capital. In order to provide our customers with the value that only a company operating in a diverse range of businesses can offer through the creation of a conglomerate premium, we will continue efforts to strengthen our management capital.

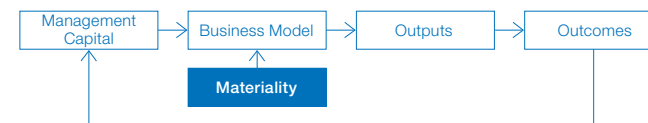


Our Management Capital



	Inputs	Outputs	Capital Enhancement and Other Measures
Financial capital	<ul style="list-style-type: none"> Shareholders' equity: ¥1,062.6 billion Total assets: ¥2,865.1 billion Net asset ratio: 46.4% Interest-bearing debt: ¥769.9 billion (including lease) D/E ratio: 0.61 	<ul style="list-style-type: none"> Net sales: ¥2,436.5 billion Ordinary profit: ¥121.3 billion ROIC: 5.3% 	<ul style="list-style-type: none"> Strengthening earnings structure Reducing low profit assets Improving capital structure
Human capital	<ul style="list-style-type: none"> Number of employees (consolidated): 38,614 Number of non-Japanese employees: 118 	<ul style="list-style-type: none"> Percentage of female managers: 3.8% Percentage of employees returning from childcare leave: 98.6% Lost time injury frequency rate: 0.21 Average hours of training per employee: 50.4 	<ul style="list-style-type: none"> Recruitment of diverse human resources D&I development Job assignment that inspires growth and ambition Compensation based on ability and role Human resources development Promotion of work style reform Enhancement of human rights awareness Creation of safe and healthy workplace
Manufactured capital	<ul style="list-style-type: none"> Capital investment (payment basis): ¥124.4 billion Non-current assets: ¥1,020.9 billion Depreciation: ¥123.9 billion 	<ul style="list-style-type: none"> Crude steel production: 5.81 million Mt (including Takasago Works) Percentage of business sites certified under the Quality Guidelines: 100% 	<ul style="list-style-type: none"> Establishing global production system Transitioning to smart factories with new digital technology Promoting white logistics Providing low-CO₂ and other socially beneficial products
Intellectual capital	<ul style="list-style-type: none"> 21 core technologies Research and development expenses: ¥46.6 billion 	<ul style="list-style-type: none"> Number of intellectual property rights owned: 7,400 Number of new business ideas created: 8 	<ul style="list-style-type: none"> Creating new value by combining core technologies Enhancing intellectual property activities Early development and commercialization of carbon-neutral technologies and products Fostering innovation through industry-academia collaboration
Social and relationship capital	<ul style="list-style-type: none"> Global operations: 24 countries Affiliate companies: 232 	<ul style="list-style-type: none"> Individual dialogue sessions with domestic and international institutional investors and analysts: 247 companies (cumulative total) Social contribution activity expenses: Approx. 0.9 billion yen 	<ul style="list-style-type: none"> Enhancement of dialogue with stakeholders Provision of new value to customers Building of responsible supply chains Contributions to local communities
Natural capital	<ul style="list-style-type: none"> Energy consumption: 178 PJ Water usage: 1,343 million m³ (including domestic Group companies with significant water use) 	<ul style="list-style-type: none"> Reduction of CO₂ emissions in production processes: 23% reduction (compared to fiscal 2013) Contribution to reduction of CO₂ emissions through technologies, products, and services: 67.42 million tons Water recycling rate: 96.2% Discharges of pollutants (COD, total phosphorus) in restricted areas: COD: 220 tons; total phosphorus: 5 tons 	<ul style="list-style-type: none"> Reducing CO₂ emissions in production processes Expanding the use of low-CO₂ products Promoting resource recycling <ul style="list-style-type: none"> Water recycling rate Reduction in discharges of pollutants (COD, total phosphorus) in regulated areas

Priority Issues for Increasing Corporate Value (Identification of Materiality)



The Kobelco Group will strive to achieve sustainable growth by tackling the five items of materiality. For each item, we have set specific indicators and targets to achieve, and we are monitoring their progress. The Board of Directors and the Executive Council monitor the progress relative to the indicators and targets and discuss necessary measures, such as reviewing and bolstering activities.

Please see pages 64–65 for specific indicators, targets, and progress regarding materiality.

Process of Identifying Materiality

Step 1

Make a comprehensive list of societal challenges¹

Step 2

- 1 Prioritize issues from the perspective of management intentions and compatibility with business operations

Value creation area

- 2 Prioritize issues based on their impact on business sustainability

Business foundation area

Step 3

Identify five items of materiality after integrating common issues and consolidating similar issues

1 Frameworks, guidelines, etc., used as references

- Ten Principles of the UN Global Compact
- Sustainable Development Goals (SDGs)
- OECD Guidelines for Multinational Enterprises
- UN Guiding Principles on Business and Human Rights
- GRI Standards
- SASB Standards
- ISO 26000

Societal challenges identified based on their importance to the Group, the magnitude of social needs, and their importance to stakeholders

	Identified Materiality	Relevant Management Capital						Specific Actions Implemented Under Business Strategy
		Financial capital	Human capital	Manufactured capital	Intellectual capital	Social and relationship capital	Natural capital	
Value creation area	① Inadequate urban infrastructure							Contributing to a green society ³ • Response to climate change • Response to resource recycling
	② Developing intelligent cities							
	③ Urban flood control							
	④ Urban public health							
	⑤ Response to climate change							
	⑥ Securing water resources							Ensuring safety and security in urban development and manufacturing • Supplying energy focused on S+3E ⁴ • Providing materials and machinery that meet needs
	⑦ Response to marine pollution							
	⑧ Advancement of robotics							
	⑨ Autonomous driving technology							
	⑩ 3D printing technology							
Business foundation area	⑪ IoT, cloud, DX							Providing solutions for the future connecting people and technology • Manufacturing and operational transformation through digitalization (DX) • Integration and innovation of diverse intellectual assets
	① Response to climate change							
	② Human rights							Promoting active participation of diverse human resources • Enhancing organizational diversity • Creating a work environment where employees can play active roles • Encouraging the growth and initiative of every employee
	③ Labor							
	④ Diversity							
	⑤ Safety and health							Pursuing governance that supports sustainable growth • Compliance and risk management • Human rights • Safety and health • Quality assurance • TQM
	⑥ Compliance							
	⑦ Quality							
	⑧ Risk management ²							

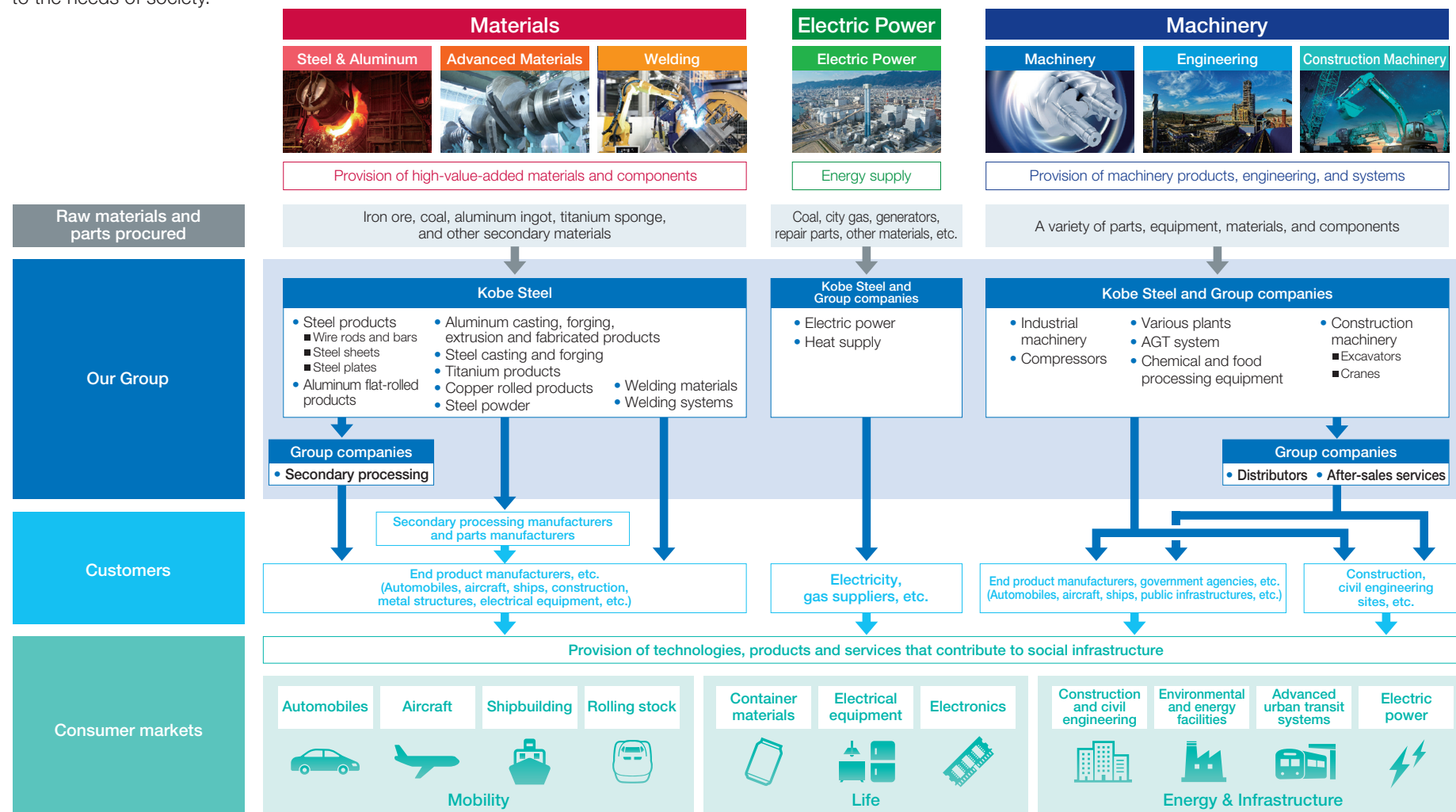
² Including top risks related to environmental laws and regulations, disaster prevention

³ A green society is not limited to the narrow meaning of a society that merely uses natural energy, but is defined as a society that addresses climate change and resource recycling.

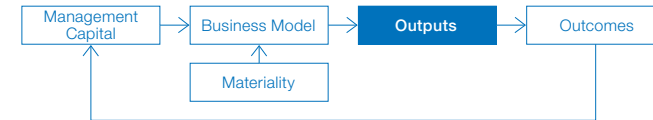
⁴ S+3E: Safety + Energy Security, Economic Efficiency, and Environment

Business Model

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, as stated in the Group Corporate Philosophy. Toward this end, we leverage our Group's comprehensive strengths to deliver a diverse range of technologies, products, and services, responding to the needs of society.



Creation of Social Value Through Technologies, Products, and Services



Mobility ¹	Life ²	Energy & Infrastructure ³
<div>Provision of high-value-added materials and components</div> <div>Steel products for automotive valve springs</div> <div>High-tensile strength steel sheets</div> <div>Aluminum sheets for automotive panels</div> <div>Aluminum forgings for suspensions</div> <div>Aluminum extrusion and fabricated products</div> <div>Steel powder</div> <div>Crankshafts</div> <div>Titanium for aircraft engine components</div> <div>Flux cored wire</div> <div>FAMILIARC™ MIX-1TR</div> <div>AXELARC™</div> <div>Provision of facilities, systems and engineering</div> <div>Isostatic pressing (IP) equipment</div> <div>Multi dismantling machines</div>	<div>Aluminum bottle can stock</div> <div>Aluminum disk materials</div> <div>Copper alloys for automotive terminals and connectors</div> <div>Semiconductor silicon wafer inspection systems</div>	<div>Eco-View™ steel plates for longer-lasting paint on bridges</div> <div>KOBEMAG™</div> <div>ARCMAN™ SENSARC™ series</div> <div>REGARC™</div> <div>Robotic Welding System for 9% Ni Steel</div> <div>Energy supply</div> <div>Kobe Power Plant No. 1 and No. 2 units</div> <div>Kobe Power Plant No. 3 and No. 4 units</div> <div>Moka Power Plant No. 1 and No. 2 units</div> <div>Polyethylene mixing and pelletizing systems</div> <div>LNG vaporizer (ORV)</div> <div>Screw-type non-standard compressors</div> <div>Screw-type standard compressor Emeraude</div> <div>Stainless Steel Digester</div> <div>MIDREX™ Process</div> <div>Kobelco Pelletizing System</div> <div>Water treatment facilities</div> <div>Grate-Type Incineration</div> <div>Building demolition machines</div> <div>Advanced urban transit systems</div> <div>Crawler cranes</div> <div>Short radius excavators</div> <div>Scrap loaders equipped with eMag system</div>

1. Mobility: Automobiles, aircraft, shipbuilding, and rolling stock 2. Life: Container materials, electrical equipment, and electronics
 3. Energy & Infrastructure: Construction and civil engineering, environmental and energy facilities, advanced urban transit systems, and electric power

Customer Business Domains and Kobelco Group's Business Segments

The Kobelco Group operates businesses across seven business segments, with its primary customer fields categorized into three areas: Mobility, Life, and Energy & Infrastructure. For each customer field, the Group's multiple segments provide technologies, products, and services in a variety of forms. We will provide our Group's unique value through the integration of the technologies, products, and services of each segment, taking a multifaceted approach to customers.

In the following pages, we highlight our efforts in the semiconductor industry as an example of cross-divisional collaboration in addressing growth markets.

1 Customer Business Domains and Our Business Segments

		Steel & Aluminum	Advanced Materials	Welding	Machinery	Engineering	Construction Machinery	Electric Power
Mobility	Automobiles	●	●	●	●		●	
	Aircraft		●	●	●			
	Shipbuilding	●	●	●	●			
Life	Food containers	●						
	IT and semiconductors	●	●		●			
Energy & Infrastructure	Construction and civil engineering	●	●	●			●	
	Urban transit					●		
	Industrial machinery			●	●			
	Energy	●	●	●	●	●		
	Renewable energy	●		●	●	●		
	Direct reduced iron (DRI)	●				●		
	Water treatment and waste treatment					●	●	
	Electric power					●		●

2 Our Products in Growth Markets

	High-performance steel	Aluminum flat rolled products	Titanium	Aluminum castings and forgings	Copper rolled products	Welding systems	Isostatic pressing (IP) equipment	Semiconductor inspection equipment	K-DIVE®
Aviation Space Defense	Megatrend: National security and geopolitical risks								
			●	●			●		
Semiconductor	Megatrend: Technological advancements								
		●		●	●		●	●	
Response to labor shortages	Megatrend: Changing demographics								
	●					●			●

Roundtable Discussion on Semiconductor Market Strategy

Revitalizing the Kobelco

Group's Collective

Strengths Centered

on Semiconductors

Kazuo Iritani

- Director, Executive Officer
- Oversees the Business Development Department

Ryosaku Kadowaki

- Executive Officer
- Head of the Advanced Materials Business

Koichi Sakamoto

- Director, Executive Officer
- Oversees Companywide technical development

Shogo Sarumaru

- Executive Officer
- Head of the Machinery Business

The Kobelco Group, often seen as a steelmaker or a heavy industry company, actually has a wide range of connections to the semiconductor industry in both the materials and machinery sectors. We are now accelerating efforts to integrate the businesses, technologies, and talent that have been developed across the Group and transform them into unique value that only our Group can offer. In this roundtable discussion, we will delve into the strengths of the Kobelco Group and new opportunities that have emerged from our focus on semiconductors.

1 How has the Kobelco Group been involved in the semiconductor industry?

With the rise of AI, data centers, and autonomous driving, the semiconductor industry is drawing attention as a growth market. The Group has long supported the semiconductor industry from both its materials and machinery businesses. Let's begin by exploring our connections to the semiconductor sector.

Kadowaki Our Group's involvement in the semiconductor industry is not a recent development. We engaged in semiconductor manufacturing through a joint venture in the 1990s, and even before that, we had built connections in various forms, such as providing materials and inspection equipment. In the 1980s, our

advanced materials business began supplying copper materials for lead frames¹ used in IC packaging, and today, we are focusing on materials for power semiconductors as well. Although our Group may not be seen as a semiconductor manufacturer, it is true that we have been involved in various aspects of the supply chain.

Sarumaru Our machinery businesses have been developing equipment for the semiconductor industry since the 1990s. The lineup included etching equipment, cleaning equipment using supercritical CO₂, high-pressure annealing equipment—products that were quite forward-looking at the time. Some of these innovations were ahead of their time and did not go on the market. Still, the technology and talent we developed back then now form the foundation of our

current initiatives.

Kadowaki A key feature of our Group today is our involvement across a broad spectrum of semiconductor manufacturing processes. We have touchpoints throughout the supply chain—from upstream to downstream—including machinery products such as wafer² inspection equipment, the High-purity Hydrogen Oxygen Generator (HHOGTM), and chambers, as well as aluminum materials and fabricated components used in manufacturing equipment, and copper materials used in the mounting process. Since we go beyond specializing in any single part of process, we are able to engage with customers from multiple perspectives. I believe this versatility is one of our Group's strength.

Sakamoto The growth potential of the semiconductor market itself is certainly very attractive. With ongoing

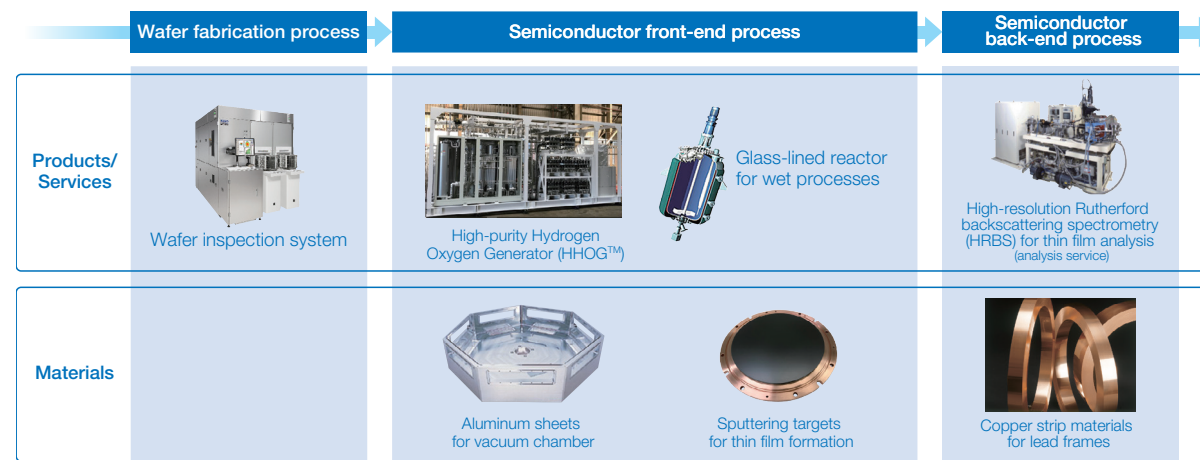
Roundtable Discussion on Semiconductor Market Strategy



advancements in AI data centers, edge AI, and autonomous driving, we believe that demand for semiconductors will continue to grow. Moreover, the industry's technological directions—such as miniaturization, multilayering, and stacking—are relatively clear, along with a well-defined development roadmap. While competition is intense, the market is fairly predictable in terms of upcoming challenges and long-term trajectory. This foreseeability allows our Group to more easily identify where we can add value and where we should focus our efforts.

For more details, please see our corporate website. <https://www.kobelco.co.jp/english/products/industry/semiconductor/>

Examples of the Group's Products Used in the Semiconductor Manufacturing Process



1. Lead frame: A metal component used to connect a semiconductor chip to an external circuit. It conducts electricity within the semiconductor package.
2. Wafer: A thin, disc-shaped material used as the substrate of semiconductor chips, mainly made of silicon.

2 Why is Groupwide collaboration needed now?

The discussion so far has clarified that our Group has diverse touchpoints with the semiconductor industry. The next question is: Why is Groupwide collaboration needed now? The key is that customers' challenges have evolved to a level where they can no longer be solved by individual business divisions alone.

Iritani The first point is how we view our relationships with customers. In the conventional approach, staff from each business division or Group company engaged with customers separately. While this had its merits, addressing increasingly complex challenges—especially in advanced fields like semiconductors—has become difficult through individual optimization alone. Our solution is to shift our perspective and see customers not as belonging to a single division, but as customers of the entire Kobelco Group. This Groupwide mindset enables us to tackle challenges collectively, and it is at this point that the integration of technologies can truly make an impact.

Kadowaki In that sense, sharing customer information is also important. We need to connect the information available within the Group and use it to explore what we can offer as the Kobelco Group.

Sarumaru One symbolic example of this is wafer inspection equipment. Kobelco Research Institute, Inc. has long operated in this field by providing equipment for wafer manufacturers. Looking ahead, demand will increase not only for wafer inspection, but also for a broader range of measurements throughout the device manufacturing process. To address this, we are working to integrate the measurement technologies of Kobelco Research Institute with the manufacturing technologies

Roundtable Discussion on Semiconductor Market Strategy

of Kobe Steel's machinery business to meet new market demands. This collaborative project is finally starting to gain momentum.

Iritani The Semiconductor Working Group is a framework designed to elevate these efforts from the individual level to the entire Company. Business divisions, the head office, technical development departments, and Group companies come together to share information, accelerate decision-making, and discuss the direction the Group should take as a whole. Although there have been interdepartmental collaborations to address individual issues in the past, what sets this initiative apart is that the entire Company is now working collectively to tackle a wider range of challenges faced by the semiconductor industry, spanning everything from idea generation to commercialization.

Sarumaru It has been about four years since we launched the Semiconductor Working Group, and we are finally establishing a framework for commercialization. We have defined specific themes, each structured as a series of steps. At every phase, we offer support and make decisions as needed to ensure effective progress. Among these, one concept that has begun to take shape is the high-durability component. When the internal components of etching equipment are exposed to increased plasma density and energy for higher productivity, they inevitably become more prone to damage. This leads to more frequent replacements and a greater likelihood of generating fine debris known as particles⁴. To address this, we are attempting to create new solutions that combine the film deposition technology of the machinery division, the aluminum substrate and surface treatment technologies of the advanced materials division, and the precision cleaning

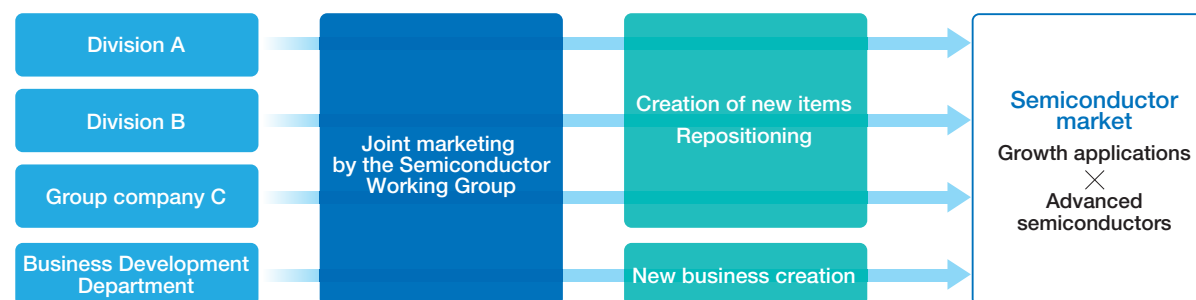
technologies from a Group company. We have now progressed to the stage of presenting samples, with commercialization in sight.

Kadowaki I believe that progress on this theme was made possible because we worked on it Companywide. If we had only approached it from the machinery business perspective, it might have ended as just a contract film coating work. Similarly, if we had sought solutions only from the materials business perspective, we might not have taken it this far. By starting from the customers' challenges, we came to recognize that "this is a theme the Kobelco Group should address together." That realization was significant.

Sakamoto Another example is the high-cooling component. The base plate that holds the wafer during the etching process must simultaneously meet multiple requirements, including low thermal expansion, high thermal conductivity, workability, and bonding capability. Challenges like these simply cannot be solved with a single technology alone. We first break down the necessary requirements and then identify the technologies that can address each one. After that, we reassemble them to form a solution. The answer can



only be found through this back-and-forth process. I believe that is where Kobelco Group's uniqueness lies. In the development of high-durability components, the combination of physical vapor deposition (PVD)⁵ coating and surface technologies including anodizing⁶ is a crucial element. It is only by integrating materials, surface treatment, film deposition, and cleaning that our proposal comes together as a complete solution. This integration across different technologies is where the Group's strengths truly shine.



4. Particles: Fine debris and foreign matter generated during the manufacturing process. In semiconductors, particles can significantly affect quality and yield.

5. PVD: A type of coating technology that creates a thin film on the surface by evaporating material.

6. Anodizing: A surface treatment that creates an oxide layer on the surface of aluminum to enhance its durability and functionality.

Roundtable Discussion on Semiconductor Market Strategy

3 How will the Kobelco Group transform through taking on challenges in the semiconductor field?

Beyond addressing the semiconductor industry, how will these initiatives transform the Kobelco Group as a whole? What stands out is not only the integration of technologies, but also a fundamental shift in mindset and organizational culture.

Kadowaki From the perspective of the materials business, the value-driven approach has been a significant learning experience. Previously, we tended to focus on manufacturing costs when considering pricing. In the components and machinery businesses, however, the start point is the value delivered to the customer, and everything is worked backward from there. This shift in perspective is now spreading in the material segments as well, and I believe it is one of the key outcomes of this initiative.

Sakamoto Even in the age of AI, it is people who must define the questions to pursue. It's important not only to focus on technology, but also to maintain interest in the



business, markets, and customers—and to formulate questions from those multiple angles. I believe that fostering this culture will become increasingly important moving forward.

Sarumaru I think it is essential to create an environment where staff members involved can engage in open, daily conversations across divisional boundaries, asking each other, “Can we do this?” or “Is that possible?” Which business division ultimately takes charge may be decided later. What matters is starting with how to solve customer's challenges. I hope this mindset becomes the norm.

Iritani These experiences should not be limited to the semiconductor business. The same approach can be applied to other areas such as energy, hydrogen, and building materials. While the semiconductor industry is growing rapidly and currently leading the way, we can extend the successful experiences, decision-making processes, and collaborative networks gained here to future growth fields as well. In addition, from a management perspective, we place great importance on quantitatively assessing the value we provide to our customers. It is not just about whether the technology is superior, but also how much it contributes to improving yield⁷ and reducing replacement frequency, and how much economic value it generates. Without this level of analysis, we cannot make decisions about pricing or business scale. The semiconductor business is a

Our efforts in the semiconductor business represent not only a challenge to enter a growth market, but also a challenge to revitalize our Group's collective strengths, leveraging our technologies, human resources, and operation bases. It's not just about bringing together individual strengths, but about connecting them from the perspective of the customer's challenges and transforming them into new value. This initiative, starting from the semiconductor industry, is steadily expanding into new growth areas and driving changes in organizational culture.



growth market, which is why we need to evaluate it objectively. We make a point of thinking from a value-based perspective and implementing systems for objective, step-by-step evaluation, such as the stage-gate process⁸. We expect that this approach, developed in the semiconductor business, will lead to tangible results and expand to drive our Group's next stage of growth.

7. Yield: The percentage of manufactured products that meet quality standards.

8. Stage-gate: A method for evaluating business development at each stage to determine whether to proceed to the next process.