

# At a Glance

1 Amounts for the factors contributing to increases/decreases in business profit and loss—of foreign exchange fluctuations, sales fluctuations, and change in product mix, etc.—are estimated values calculated based on certain criteria set by the Company. In addition, there is a possibility of circumstances in which it is advisable to confirm combined amounts, especially for sales fluctuations and changes in sales composition, as these factors are often of an inseparable nature.

Business Segment	Revenue (FY2023)	Orders received (FY2023)	Business profit (FY2023)	Business profit margin (FY2023)	Capital expenditures (FY2023)
<b>Aerospace Systems</b>	¥396.1 billion	692.6 (Billion yen)	4.2 (Billion yen)	14.8 (%)	21.7 (Billion yen)
<b>Rolling Stock</b>	¥195.9 billion	195.9 (Billion yen)	1.9 (Billion yen)	3.7 (%)	1.1 (Billion yen)
<b>Energy Solution &amp; Marine Engineering</b>	¥353.2 billion	401.6 (Billion yen)	9.0 (Billion yen)	31.9 (%)	6.4 (Billion yen)
<b>Precision Machinery &amp; Robot</b>	¥227.9 billion	227.9 (Billion yen)	-1.9 (Billion yen)	-0.9 (%)	6.7 (Billion yen)
<b>Powersports &amp; Engine</b>	¥592.4 billion	592.4 (Billion yen)	8.1 (Billion yen)	48.0 (%)	20.0 (Billion yen)

## Aerospace Systems

### Reaching greater heights in the domains of aviation and space through the integration of cutting-edge technologies

Since Kawasaki's launch of aircraft manufacturing in 1918, we have branched out into a wide range of businesses as one of Japan's leading makers of aircraft and aircraft engines.

In the second quarter of fiscal 2023, we reported 58.0 billion yen in one-time losses in relation to the PW1100G-JM Engine Program for commercial aircraft, causing inconvenience and concern to our stakeholders. On the other hand, air travel passenger demand has returned to pre-COVID levels. In addition, under the government's policy of drastically reinforcing defense capabilities, we anticipate that the favorable business environment will continue into the future and that the profitability and scale of the defense business will improve. We will ensure stable earnings through comprehensive risk management and other measures while taking action to create future opportunities.



Hiroyoshi Shimokawa  
President, Aerospace Systems Company

#### Main Products

- Aircraft for the Japan Ministry of Defense
- Commercial helicopters
- Aero engines
- Components for commercial aircraft
- Missiles/Space equipment
- Aerospace gearboxes

#### SWOT Analysis by Business

Core Competence (Strengths)	Aerospace	<ul style="list-style-type: none"> <li>• Technological capabilities as a manufacturer of finished aircraft acquired through the defense aircraft business (system integration capabilities)</li> <li>• Technological capabilities based on international joint development with Boeing, and sophisticated, large-scale production facilities</li> <li>• High quality and productivity through the Kawasaki Production System (KPS)</li> </ul>
	Aero engine	<ul style="list-style-type: none"> <li>• Sophisticated technological capabilities built through international joint development projects and developing engines for defense aircraft</li> <li>• High quality and productivity through leading-edge production technology</li> </ul>
	Shared	<ul style="list-style-type: none"> <li>• Broad expansion of development, manufacturing, and services to aircraft and aero engines</li> </ul>
Challenges (Weaknesses)		<ul style="list-style-type: none"> <li>• High degree of reliance on specific customers (high-volatility revenue structure)</li> <li>• Businesses that require large volumes of invested capital</li> </ul>
Opportunities		<ul style="list-style-type: none"> <li>• Long-term growth in air passenger and air freight demand</li> <li>• Decarbonization of the aircraft industry</li> <li>• Increase in defense budget and ongoing development and production of domestically-manufactured defense equipment</li> <li>• Improvement in profitability of defense equipment</li> <li>• Prospects of defense equipment exports</li> </ul>
Risks (Threats)	Aerospace	<ul style="list-style-type: none"> <li>• Fiercely competitive environment, reflecting competition for market share between Boeing and Airbus</li> <li>• Rise of manufacturers in emerging countries</li> <li>• Supply chain risks throughout international joint development structures</li> </ul>
	Aero engine	<ul style="list-style-type: none"> <li>• Development risks related to introducing cutting-edge technologies</li> <li>• Substantial impact if risks materialize (risks borne by other companies) in international joint development projects (commercial aero engines)</li> </ul>

#### Initiatives to Achieve Group Vision 2030

A safe and secure remotely connected society	-
Near-future mobility	<ul style="list-style-type: none"> <li>• Developing vertical take-off and landing (VTOL) aircraft to link logistics bases and cover the last mile</li> <li>• Realizing urban transportation that seamlessly connects people and freight</li> <li>• Provision of Z-Leg™ (Zeta Leg), a one-stop service for arranging air travel</li> </ul>
Energy and environmental solutions	<ul style="list-style-type: none"> <li>• Studying CO<sub>2</sub>-free (hydrogen-fueled) air transportation systems</li> </ul>

#### Topic | Disaster support and growth potential through Z-Leg™

Z-Leg™ is a helicopter reservation service that was launched in March 2023. After the 2024 Noto Peninsula Earthquake in January 2024, the service was used to airlift 650 kg of relief supplies, including gasoline, to evacuation centers in the Orito and Kawaura districts of Suzu City. During normal times, helicopters function as a means of efficient transport to places that passengers want to visit, and this experience demonstrates that they can also be useful in disaster relief.

Going forward, we will take advantage of the flying capabilities and vertical takeoff and landing ability of helicopters to expand our "anytime, anywhere" transportation services so that geographical features do not cause disadvantages to regions or customers. In conjunction with this, we will make proposals that lead to regional revitalization.

We plan to ramp up sales to individuals in fiscal 2024 with a target of reaching annual net sales of 10 billion yen by fiscal 2030.



Cargo loading work for the Z-Leg™ service

#### Priority Measures and Concrete Initiatives

Creating structures for business expansion	<ul style="list-style-type: none"> <li>• Reorganize supply chains and production expansion systems to respond to robust demand</li> <li>• Promote business efficiency and productivity improvements to obtain new business opportunities</li> <li>• Make steady progress on existing orders for development projects and mass production contracts for defense aircraft and helicopters</li> </ul>
Reinforce activities in the defense business	<ul style="list-style-type: none"> <li>• Take action in seven priority fields to strengthen defense capabilities</li> </ul>
Implement technology strategies based on market trends	<ul style="list-style-type: none"> <li>• Promote technology development including the use of civilian technologies to achieve stronger defense capabilities</li> <li>• Undertake environmental technology development for the creation of a decarbonized society using the NEDO Green Innovation Fund</li> </ul>

#### Topic | Increase orders from the Ministry of Defense and improve profitability

The Defense Buildup Program was formulated in December 2022 to dramatically strengthen Japan's defense capabilities. As a result, we expect to expand our business with the Ministry of Defense in the future. In fiscal 2023, orders from the Ministry of Defense in the aerospace systems segment reached 449 billion yen, an increase of 283.5 billion yen from the previous fiscal year, mainly due to an increase in orders in the large aircraft field (the companywide balance of orders in fiscal 2023 was 553 billion yen, a year-on-year increase of 283.5 billion yen).

In addition, a new policy regarding the assessment of profit margins adopted by the Ministry of Defense has led to improved profitability, and this is expected to contribute to improved profitability in this segment over the medium term.



RC-2 (Signals intelligence aircraft)

## Rolling Stock

### A railway systems manufacturer meeting customer needs by delivering the highest standard of technology

Since Kawasaki began the manufacture of railcars in 1906, we have expanded our business in Japan, the United States, and Asia as Japan's top manufacturer possessing the highest levels of technology.

Since the corporate split from Kawasaki Heavy Industries in fiscal 2021, we achieved profitability in the three fiscal years up to fiscal 2023. In the United States, we successfully shipped the final railcar for the Long Island Rail Road M-9 Project, which we have been working on for some time, and we are now ramping up manufacture and delivery of R211 mass-production subway cars for the New York City Transit Authority. Going forward, we will continue our efforts to improve profitability.

Against the background of structural reforms carried out since the corporate split in October 2021, we will strive to enhance profitability by accepting orders at reasonable prices, reinforcing contract risk management, promoting concentration on focal markets, and introducing the production know-how of the Kawasaki Group.



**Hiroshi Murao**  
Representative Director,  
President and Chief Executive Officer,  
Kawasaki Railcar Manufacturing Co., Ltd.

### Main Products

- Electric train cars (including Shinkansen [bullet trains] and new transit systems)
- Electric and diesel locomotives
- Passenger coaches
- Bogies

### SWOT Analysis by Business

<b>Core Competence</b> (Strengths)		<ul style="list-style-type: none"> <li>• Ability to fulfill contracts cultivated from extensive domestic and overseas track record</li> <li>• Partnership capabilities with other companies in execution of overseas projects (Kawasaki Initiative)</li> <li>• High-tech expertise built on comprehensive heavy industry strengths leveraging synergies with other business areas</li> </ul>
<b>Challenges</b> (Weaknesses)		<ul style="list-style-type: none"> <li>• Small business scale in comparison with major overseas competitors</li> <li>• Business model centered on rolling stock supply (fulfilling railway system needs through facility to engage in external partnerships)</li> </ul>
<b>Opportunities</b>	Domestic market	<ul style="list-style-type: none"> <li>• Demand for railcars that contribute to carbon neutrality</li> <li>• Shift of cargo transportation to railways</li> </ul>
	Asian emerging nations market	<ul style="list-style-type: none"> <li>• Demand for urban transportation infrastructure</li> <li>• Participation in high-speed railway project in India</li> </ul>
	North American market	<ul style="list-style-type: none"> <li>• Demand for subway and commuter train rolling stock</li> <li>• Provision of remote track monitoring</li> </ul>
	Common to all markets	<ul style="list-style-type: none"> <li>• Expanding stock demand including components, maintenance contracts, and repair and rebuild work for rolling stock</li> </ul>
<b>Risks</b> (Threats)	Domestic market	<ul style="list-style-type: none"> <li>• Decline in operations at domestic plants due to lower investment in railcars during the COVID-19 pandemic</li> <li>• Intensifying price competition due to declining demand</li> </ul>
	Asian emerging nations market	<ul style="list-style-type: none"> <li>• Country risk in new markets for Kawasaki</li> <li>• Emergence of Chinese companies</li> </ul>
	North American market	<ul style="list-style-type: none"> <li>• Soaring prices for materials and equipment</li> <li>• Securing human resources</li> </ul>

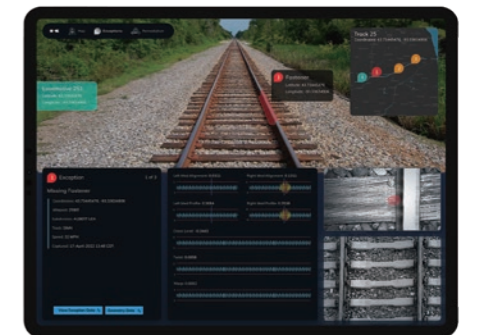
### Initiatives to Achieve Group Vision 2030

<b>A safe and secure remotely connected society</b>	<ul style="list-style-type: none"> <li>• Streamlining of rolling stock and rail track maintenance, promotion of condition monitoring projects aimed at automation and labor saving</li> </ul>
<b>Near-future mobility</b>	<ul style="list-style-type: none"> <li>• Achieving railways mobility which seamlessly connects people and commodities</li> </ul>
<b>Energy and environmental solutions</b>	<ul style="list-style-type: none"> <li>• Catering to carbon-neutral needs for internal combustion rolling stock</li> </ul>

### Topic | Advances in the parts and service business including remote track monitoring services

We are taking action in Japan and overseas to commercialize services for remotely monitoring the condition of railcars and tracks. For the service, we install monitoring devices including sensors and cameras on railcars and bogies to measure and analyze the status of railcars and tracks in real time during commercial operation, and if any abnormalities are detected, the railway operator is immediately notified. In addition, by analyzing the accumulated data and making predictions concerning and proposing appropriate maintenance times, operators can perform efficient maintenance.

In the Rolling Stock business, based on our extensive experience of delivering railcars, we seek to capture business opportunities throughout the entire lifecycle of the railcars and have established a policy of increasing the portion of sales revenue from the parts and service business to at least 20% by fiscal 2030.



Remote track monitoring system

### Priority Measures and Concrete Initiatives

<b>Compliance with delivery schedules for overseas projects</b>	<ul style="list-style-type: none"> <li>• Dhaka MRT Line-6 Fiscal 2024: Delivery of last railcars and depot equipment</li> <li>• U.S. R211 Fiscal 2024: Delivery of last railcars (base contract) Fiscal 2025: Start of delivery of mass production railcars (Option 1 contract)</li> </ul>
<b>Achieving quality levels trusted by customers</b>	<ul style="list-style-type: none"> <li>• Reduction of failures and reworking expenses</li> <li>• Further advancement of the Kawasaki Production System (KPS) and deployment at plants in North America</li> </ul>
<b>Expansion of component and aftersales service sales and of maintenance businesses</b>	<ul style="list-style-type: none"> <li>• Expansion of remote track monitoring equipment in North America and development of a service provision platform</li> <li>• Expansion of sales of rolling stock condition monitoring equipment for domestic railways operators</li> </ul>

### Topic | Delivery of R211 subway cars to New York City Transit Authority starts

Mass production of subway cars (R211) under the Base Contract with the New York City Transit Authority (a total of 535 cars ordered in fiscal 2018) is progressing, and a total of 160 cars were delivered in fiscal 2023.

We have been conducting business with the New York City Transit Authority for more than 40 years, gaining recognition for the high reliability of our railcars and our ability to perform contracts. In fiscal 2023, we held a 35% share of deliveries to the Transit Authority. In addition, deliveries under the Option 1 Contract (640 cars), which were ordered in fiscal 2022, will commence in fiscal 2025, and we also expect to receive orders under the Option 2 Contract.

If the Option 2 Contract is exercised, we will receive orders for a total of approximately 1,600 railcars with an order amount of approximately 4.4 billion dollars, making this our largest railcar project, and our share of deliveries to the Transit Authority will expand to approximately 50%.



R211 subway cars for the New York City Transit Authority

## Energy Solution & Marine Engineering

### Seamless progress from low carbon to decarbonization through highly efficient products and hydrogen technologies

Ever since the establishment of the Kawasaki Tsukiji Shipyard in 1878, we have been developing business in the four fields of energy solution, plant engineering, marine machinery, and ship and offshore structures based on our strengths in technological prowess and quality. In addition, we established "hydrogen and carbon neutral" as a new business field in August 2023.

In fiscal 2023, we achieved significantly higher profits compared to the previous fiscal year. In the energy solution, plant engineering and marine machinery fields, gas turbines and gas engines in particular had higher profits, and in the ship and offshore structures field, there were contributions from higher profit on equity method investments and cost reductions for LPG/ammonia carriers.

Going forward, we will endeavor to maintain and improve earnings power through appropriate risk management and sales at appropriate prices. Furthermore, we will promote the development of products and green transformation products that contribute to the low-carbon and decarbonized society and aim to achieve high growth in the domain of "energy and environmental solutions" set out in the Group Vision 2030.



Motohiko Nishimura  
President, Energy Solution & Marine Engineering Company

#### Main Products

Hydrogen/CN	Energy solution	Plant engineering	Marine machinery	Ship & offshore structure
<ul style="list-style-type: none"> <li>Shipping/receiving terminals</li> <li>Liquefied hydrogen tanks</li> <li>Onshore LNG tanks</li> <li>Carbon dioxide capture, utilization and storage (CCUS)</li> </ul>	<ul style="list-style-type: none"> <li>Gas turbine cogeneration systems</li> <li>Gas and diesel engines for power generation</li> <li>Steam turbines</li> <li>Aerodynamic machinery</li> <li>Boiler plants</li> <li>Combined cycle power plants (CCPPs)</li> </ul>	<ul style="list-style-type: none"> <li>Industrial plants (cement, fertilizer, and others)</li> <li>Municipal waste incineration plants</li> <li>Material handling systems</li> <li>Tunnel boring machines</li> <li>Crushing machines</li> </ul>	<ul style="list-style-type: none"> <li>Marine gas turbines/reduction gear</li> <li>Marine reciprocating engines</li> <li>Marine propulsion systems</li> </ul>	<ul style="list-style-type: none"> <li>Gas carriers</li> <li>Liquefied gas carriers</li> <li>Jetfoils</li> <li>Submarines</li> </ul>

#### SWOT Analysis by Business

Category	Business Area	Key Points
Core Competence (Strengths)	Hydrogen/CN	Hydrogen production, liquefaction, storage, transportation, and use (power generation) technology
	Energy solution	Sales structures with close ties to local communities that use overseas bases
Challenges (Weaknesses)	Plant engineering	Integrated engineering powers acquired and refined through various plant projects
	Marine machinery	Capability to make optimized proposals for whole marine propulsion systems with advantages in core components
Opportunities	Ship & offshore structure	Energy-saving, environmental burden-reducing technologies, and ability to develop new ship designs
	Shared	High-efficiency and high-performance core components that can seamlessly achieve a transition from low carbon to decarbonization while using customer assets
Risks (Threats)	Shared	Proposal of solutions that use synergies generated through combinations of high-efficiency core components
	Hydrogen/CN	Number of construction projects undertaken at overseas hydrogen-related plants
Challenges (Weaknesses)	Plant engineering	Recognition in overseas markets
	Energy solution	Improvement of cost structures of commercial vessels built at domestic shipyards and propulsion systems for commercial vessels
Opportunities	Marine machinery	Acceleration of trend to realize the goal of carbon neutrality, including strengthening of environmental regulations
	Ship & offshore structure	Expanding demand for facilities that can use both existing fuels and hydrogen in response to increasing needs for decarbonization
Risks (Threats)	Shared	Growing demand for energy and infrastructure in emerging and resource-rich countries
	Shared	Weakening investment appetite paralleling economic slowdowns in emerging countries and resource-rich countries
Challenges (Weaknesses)	Shared	Energy policy trends in respective countries (taxonomy regulations, amendments to subsidies systems, changes accompanying geopolitical risks, etc.)

### Initiatives to Achieve Group Vision 2030

1 Autonomous Underwater Vehicle 2 Virtual Synchronous Generator  
3 Direct Air Capture 4 Kawasaki CO<sub>2</sub> Capture

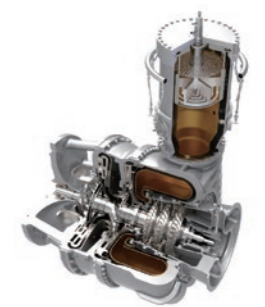
<b>A safe and secure remotely connected society</b>	<ul style="list-style-type: none"> <li>Providing solutions for disaster response, such as stand-by gas turbines</li> <li>Promoting the automation of waste incinerator operation</li> <li>Developing AUVs<sup>1</sup></li> </ul>
<b>Near-future mobility</b>	<ul style="list-style-type: none"> <li>Promoting the uptake of electric and hybrid propulsion systems (gas engine hybrid-propelled / battery-propelled) for environmentally-friendly vessels</li> <li>Demonstration testing of advanced safety berthing support system</li> </ul>
<b>Energy and environmental solutions</b>	<ul style="list-style-type: none"> <li>Quickly establishing a hydrogen supply chain (production, transportation, storage, utilization)</li> <li>Accelerating initiatives and forming partnerships aimed at the realization of a hydrogen-based society by encouraging stakeholders to be involved</li> <li>In an environment where fluctuating capacity of renewable energy is increasing, social implementation of gas turbines and gas engines that can provide "adjustability" and energy storage systems with virtual synchronous generator (IVSG<sup>2</sup>) functions that can provide "inertia"</li> <li>Undertaking development aimed at the practical application of carbon recycling technology</li> <li>Development of a large-scale carbon capture business (DAC<sup>3</sup> &amp; KCC<sup>4</sup>)</li> </ul>

#### Topic | Rollout of hydrogen gas turbines that respond to diverse hydrogen use needs

In September 2023, IBIDEN Engineering Co., Ltd. and Kawasaki received an order from JFE Engineering Corporation for one PUC80D 8MW-class co-generation system capable of hydrogen co-firing. Operation is scheduled to commence in April 2025, and we aim to convert the turbine to hydrogen fuel in 2027 or later.

In October 2023, we completed conversion for Belgium-based Chevron of a GPB17D 1.8MW-class natural gas fired gas turbine co-generation system to a GPB17D-H2 capable of hydrogen co-firing at any ratio up to 30% hydrogen by volume, and commercial operation started.

In January 2024, the PUC17MMX 1.8MW-class 100% hydrogen-fueled, dry-combustion gas turbine cogeneration system received the Masuda Award of the Nikkan Kogyo Shimbun Ten Great New Product Awards. The system was recognized for its ability to contribute significantly to reducing CO<sub>2</sub> emissions through the commercialization of the world's first gas turbine capable of hydrogen combustion using a dry method that does not require water to reduce NO<sub>x</sub> emissions.



PUC17MMX

#### Priority Measures and Concrete Initiatives

<b>Providing products that contribute to the achievement of a low/decarbonized society</b>	<ul style="list-style-type: none"> <li>LPG/ammonia carriers</li> <li>High-efficiency gas turbine / gas engines</li> <li>New municipal waste incineration plants (energy-saving)</li> <li>Hybrid and electric marine propulsions systems</li> </ul>
<b>Developing products for the transition to decarbonized energy</b>	<ul style="list-style-type: none"> <li>Commercialization of liquefied hydrogen carriers</li> <li>Commercialization of hydrogen shipping/receiving terminals</li> <li>Development of marine hydrogen boilers and marine hydrogen-fueled engines</li> <li>Promotion of the introduction of energy-saving systems that use gas turbines and gas engines and can support the transition from low-carbon (natural gas-fired and hydrogen mixed fuel) to decarbonization (hydrogen-only fired)</li> <li>Development of technologies to separate and capture CO<sub>2</sub></li> </ul>

#### Topic | Provision of marine hybrid propulsion systems that contribute to the creation of a decarbonized society

In December 2023, we delivered a gas engine hybrid propulsion system that combines a natural gas-fired engine with a large capacity battery for use in a bulk carrier operation by NS United Naiko Kaiun Kaisha, Ltd. This was the world's first delivery of a hybrid propulsion system using a gas engine as the main engine of a bulk carrier.

Compared to a comparable vessel with a conventional heavy oil-fired engine, this new system can reduce CO<sub>2</sub> emissions by approximately 24% and substantially reduce SO<sub>x</sub> and NO<sub>x</sub> emissions as well. In addition, by operating in electric propulsion mode powered by the battery when arriving in and departing from port, zero-emission propulsion with no greenhouse gas emissions is possible.



The Shimokita Maru equipped with a Kawasaki gas engine hybrid propulsion system

## Precision Machinery & Robot

### Building the future for people and society through integrated solutions that use hydraulic systems and robots

We are contributing to the development of industry both in Japan and overseas, in the field of hydraulic components and systems as a top maker with the industry's foremost scale and production equipment and in the field of robotics as a pioneer of industrial robots.

Fiscal 2023 was a challenging year, with slowdowns in the semiconductor market and the construction machinery market in China as well as a decline in operations at Chinese factories. In fiscal 2024, we expect that the semiconductor market will turn toward recovery, and we will continue our efforts undertaken since fiscal 2023 to set appropriate prices and reduce costs, enabling the company to achieve a certain level of profit even under a difficult business environment.

In the field of hydraulic components and systems, our aim is to improve our profitability by utilizing Kawasaki's strengths in quality and development capability to introduce new products and systems in response to the electrification and automation of construction machinery. And in the field of robotics, we will promote business expansion on the semiconductor field and leverage open innovation to tap new fields with high levels of growth potential, such as medical care and logistics.



Hidehiko Shimamura  
President, Precision Machinery & Robot Company

#### Main Products

- Hydraulic components for construction machinery
- Hydraulic components and systems for industrial machinery
- Hydraulic deck machinery for marine products
- Hydraulic components for agricultural machinery
- Hydraulic steering gears for marine products
- Industrial robots
- Medical and pharmaceutical robots

#### SWOT Analysis by Business

<b>Core Competence</b> (Strengths)	Hydraulic components & systems	<ul style="list-style-type: none"> <li>•Accumulated world-class, leading-edge technology, systemization capabilities, and brand power in the area of excavator hydraulic machinery</li> <li>•Ability to respond to customer requests</li> </ul>
	Robotics	<ul style="list-style-type: none"> <li>•Diverse production sites within the Group as a comprehensive heavy industries enterprise</li> <li>•Ability to develop applications and make system proposals closely matched to customer needs</li> <li>•Ability to create new technologies and new fields in such areas as medicine and remote control technology</li> </ul>
<b>Challenges</b> (Weaknesses)	Shared	<ul style="list-style-type: none"> <li>•New product development capabilities in the field of motion control based on the integration of hydraulic technologies and robotics</li> </ul>
	Hydraulic components & systems	<ul style="list-style-type: none"> <li>•Sales expansion for aftersales service business</li> <li>•High percentage of sales to the Chinese construction machinery market</li> </ul>
<b>Opportunities</b>	Robotics	<ul style="list-style-type: none"> <li>•Need to expand business to realize merits of scale</li> </ul>
	Hydraulic components & systems	<ul style="list-style-type: none"> <li>•Advances in electrification and automation of construction machinery</li> <li>•Need to expand sales in such fields as agricultural machinery and forestry machinery</li> <li>•Progress toward achieving carbon neutrality</li> </ul>
<b>Risks</b> (Threats)	Robotics	<ul style="list-style-type: none"> <li>•Expansion of fields of robot application through the realization of coexistence and collaboration between humans and robots</li> <li>•Expansion of demand intended to eliminate labor shortages and raise quality</li> <li>•Progress in use of robots beyond industrial applications (such as medical treatment and nursing care)</li> </ul>
	Hydraulic components & systems	<ul style="list-style-type: none"> <li>•Emergence of competing manufacturers and intensifying competition in the Chinese construction equipment market</li> <li>•Long-term slump in the Chinese construction machinery market</li> </ul>
	Shared	<ul style="list-style-type: none"> <li>•Increasingly fierce competition with rival companies</li> <li>•Sluggish demand for semiconductor manufacturing machinery</li> <li>•Rising materials costs</li> </ul>

### Initiatives to Achieve Group Vision 2030

<b>A safe and secure remotely connected society</b>	<ul style="list-style-type: none"> <li>•Developing healthcare-related businesses, such as the <i>hinotori</i><sup>TM</sup> surgical robot system and a robotic operating table</li> <li>•Building the remote robot platform business connecting people who want to work with businesses seeking labor</li> </ul>
<b>Near-future mobility</b>	<ul style="list-style-type: none"> <li>•Creating delivery robots to link logistics bases and cover the last mile</li> <li>•Developing in-hospital delivery services using the FORRO indoor delivery robot</li> </ul>
<b>Energy and environmental solutions</b>	<ul style="list-style-type: none"> <li>•Developing hydrogen fuel-related products</li> <li>•Reinforcing and expanding the hydraulic machinery and systems solutions business</li> </ul>

#### Topic | Energy-saving hydraulic booster "Hydrogen Compressor" for hydrogen stations launched

We released an energy-saving hydraulic booster "Hydrogen Compressor" for hydrogen stations in April 2023.

The hydrogen compressor, developed jointly with Sugino Machine Limited, performs the role of compressing the hydrogen gas needed for fueling fuel cell vehicles (FCVs). The hydraulic unit uses a Kawasaki ECO SERVO<sup>®</sup> rotation speed control unit, which has been highly praised in the industrial equipment field, to achieve substantial energy savings.

By expanding sales of hydrogen compressors in response to the increased use of FCVs, we are contributing to the development of hydrogen stations and other infrastructure.



Hydraulic booster "Hydrogen Compressor"

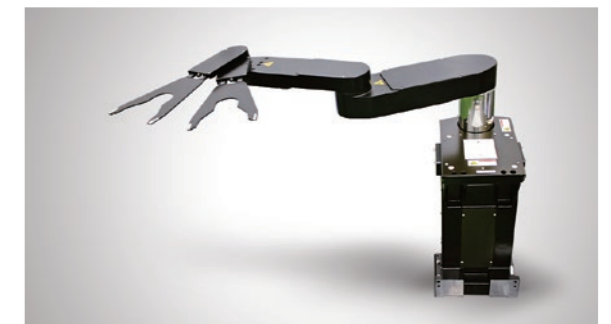
### Priority Measures and Concrete Initiatives

<b>Measures for development of the hydraulic business</b>	<ul style="list-style-type: none"> <li>•Develop new products and markets in the construction field: Leverage our advanced control technologies and development capabilities to develop markets in response to electrification and automation</li> <li>•Reinforce the after-sales service business: Expand after-sales service by making use of past sales performance and build and expand sales networks</li> <li>•Reinforce the hydrogen-related business and defense business: Develop hydrogen compressors, fuel cell systems, and other products and expand defense-related products for in-Group transactions</li> </ul>
<b>Strategic challenges in the robot business</b>	<ul style="list-style-type: none"> <li>•Concentrate investment in high value-added fields: Establish supply systems in preparation for the full-scale recovery of the semiconductor market and expand business in new fields</li> <li>•Reinforce business in the medical field: Expand adoption of the <i>hinotori</i><sup>TM</sup> robot and differentiate our products based on their remote operation surgery and other technology</li> <li>•Strengthen brands: Promote collaboration with unicorn startups with a focus on rapid implementation and promote commercialization in the social robot field</li> </ul>

#### Topic | Future development of the semiconductor-related business

As a meeting held in December 2023 to report on the progress of implementation of Group Vision 2030, we announced our policy of future business development in the semiconductor-related business.

As of 2024, we boast a share of approximately 60% of the global market for wafer transport robots (atmospheric processes) that operate within leading semiconductor manufacturing devices in semiconductor manufacturing front-end processes. Going forward we will seek to increase this share even further while developing products in new fields, including back-end processes, vacuum processes, and system products. In addition, we will expand business for semiconductor manufacturing equipment maintenance, automation solutions, and other areas with a target of achieving sales revenue of 100 billion yen in the semiconductor-related business by fiscal 2030.



A wafer handling robot for use with semiconductor manufacturing equipment

## Powersports & Engine

### Let the Good Times Roll! Kawasaki delivers the ultimate in excitement

Ever since Kawasaki commenced the production of engines for motorcycles in 1953, we have been turning out innovative products with “Let the Good Times Roll” (Working for the happiness and joy of all those whose lives Kawasaki touches) as our corporate mission.

Compared to fiscal 2022, when the market inventories contracted due to effects from problems procuring materials and parts and disruption of logistics, in fiscal 2023 replenishment of inventories proceeded and the competitive environment normalized, causing a decline in profit due to increases in various sales costs and other factors. On the other hand, mass production of off-road four-wheelers started at our Mexico Plant, and going forward we will seek to achieve high growth in the off-road four-wheeler business by expanding production capacity and continuously introducing new products.

In addition, we are accelerating development of EVs and HEVs with an eye toward future low-carbon emissions and decarbonization, and we will continue to take on new challenges to achieve sustainable growth and live up to our corporate philosophy as the “Good Times Company.”



**Hiroshi Ito**  
Representative Director,  
President and Chief Executive Officer,  
Kawasaki Motors, Ltd.

### Main Products

- Motorcycles
- Off-road four-wheelers (Utility vehicles, ATVs)
- Personal watercraft (PWC)
- General-purpose engines

### SWOT Analysis by Business

<b>Core Competence (Strengths)</b>		<ul style="list-style-type: none"> <li>•Sales and marketing capabilities that realize unique, premium brands</li> <li>•Development, production, procurement, and quality assurance capabilities that create products embodying both heritage and innovation</li> <li>•Global production, sales, and service structure</li> <li>•Advanced technology expertise built on comprehensive heavy industry strengths leveraging synergies with other companies in the Kawasaki Group</li> </ul>
<b>Challenges (Weaknesses)</b>		<ul style="list-style-type: none"> <li>•Securing production capacity to respond to rapidly rising demand</li> <li>•Building agile organizational structures that can respond to rapid change</li> </ul>
<b>Opportunities</b>	Motorcycles	<ul style="list-style-type: none"> <li>•Stable demand in developed countries with mature markets</li> <li>•Medium- to long-term market expansion in emerging countries due to expanding populations and economic growth</li> </ul>
	Utility vehicles, ATVs & PWC General-purpose engines Shared	<ul style="list-style-type: none"> <li>•Steady growth in demand for off-road four-wheelers in North America</li> <li>•Firm growth of the lawn-related market, reflecting U.S. housing market expansion</li> <li>•Collaborations and alliances with other companies</li> <li>•Entry into new fields using internal combustion engine technologies</li> <li>•Establishing a brand image in the carbon neutrality field</li> </ul>
<b>Risks (Threats)</b>	Motorcycles	<ul style="list-style-type: none"> <li>•Expansion into the leisure sector by brands from emerging markets, such as China and India</li> <li>•Intensifying price competition in emerging markets</li> </ul>
	Utility vehicles, ATVs & PWC Shared	<ul style="list-style-type: none"> <li>•Intensifying product development competition and price competition</li> <li>•Rising customs tariffs and parts costs in conjunction with change of government in the U.S.</li> <li>•Attenuating demand due to global inflation and tightened monetary policies, including increased interest rates in the U.S.</li> <li>•Difficulty procuring engine parts in conjunction with advancing electrification</li> <li>•Higher development expenses and product prices due to tightening of environmental regulation</li> </ul>

### Initiatives to Achieve Group Vision 2030

<b>A safe and secure remotely connected society</b>	<ul style="list-style-type: none"> <li>•Providing advanced rider and driver support</li> <li>•Providing disaster response solutions</li> </ul>
<b>Near-future mobility</b>	<ul style="list-style-type: none"> <li>•Realizing a society equipped to achieve the safe environmentally-friendly mobility of people and commodities</li> <li>•Commercializing new modes of mobility towards the elimination of manpower shortages in the logistics field</li> </ul>
<b>Energy and environmental solutions</b>	<ul style="list-style-type: none"> <li>•Making use of hydrogen fuel</li> <li>•Shifting to battery electric vehicles / hybrid electric vehicles</li> </ul>

### Topic | Hybrid and electric motorcycles announced

In the autumn of 2023, we announced the Ninja 7 Hybrid and Z7 Hybrid, the world’s first strong hybrid motorcycles, and the Ninja e-1 and Z e-1 electric motorcycles.

While seeking carbon neutrality, Kawasaki’s distinctive performance and design, which embody the “Fun to Ride” spirit, has been acclaimed worldwide. In addition, these motorcycles incorporate features unique to electric vehicles not available on conventional gasoline vehicles, providing new value to customers and contributing to strengthening the corporate brand.



Z7 Hybrid

### Priority Measures and Concrete Initiatives

<b>Supplying products as much as demanded</b>	<ul style="list-style-type: none"> <li>•Continuously introduce new models</li> <li>•Flexibly change production and sales plans</li> <li>•Maintain appropriate inventory levels</li> </ul>
<b>Expansion of the off-road four-wheeler business and decarbonization/ electrification solution</b>	<ul style="list-style-type: none"> <li>•Investing in development toward the enhancement of product competitiveness</li> <li>•Stable operations at new Mexico Plant</li> <li>•Development and launch of electrified and hybrid models</li> <li>•Joint research on hydrogen engines with other companies</li> </ul>
<b>Promoting business process re-engineering through DX</b>	<ul style="list-style-type: none"> <li>•Increased efficiency of global operations through digitalization</li> <li>•Reduction of development times and higher efficiency through the use of digital technologies</li> </ul>
<b>Securing free cash flow</b>	<ul style="list-style-type: none"> <li>•Securing stable free cash flow for future investment</li> </ul>

### Topic | Off-road four-wheelers enter a new high-growth phase with the introduction of appealing new products

In February 2024, to supplement the existing TERYX series (for recreational use) and MULE series (for multi-purpose use), we launched the RIDGE and RIDGE XR series, which can be used for a variety of purposes from day-to-day work to leisure. These models feature high-performance engines and comfortable and high-quality cabins, and high demand is expected, particularly in the mid-western region of the U.S., which experience harsh conditions including heat and cold.

By actively introducing new products in the off-road four-wheeler market, which is expected to undergo steady growth in the future, Kawasaki Motors will take on the challenges of expanding sales revenue to 300 billion yen on the four-wheeler and PWC business in fiscal 2025 (compared to 180.6 billion yen in fiscal 2023).



RIDGE XR HVAC