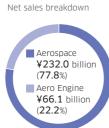
At a Glance

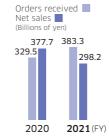
Aerospace Systems

component parts for Boeing , etc., despite a decrease in component parts for commercial aircraft jet engines due to application of Accounting Standard for Revenue Recognition

Decreased due to a decrease in component parts for commercial aircraft jet engines caused by the application of Accounting Standard for Revenue Recognition, and decreases for Ministry of Defense and component parts for

Improved due to an improvement in profitability of component parts for commercial aircraft jet engines and component parts for Boeing, despite a decrease in revenue







Rolling Stock

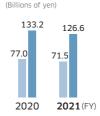
Decreased compared with the previous period, when orders for Shinkansen (bullet train) were large, despite domestic orders for subway in this period

Decreased due to a decrease in other regions despite an increase in the United States

 Operating profit (loss)
 Improved due to an improvement in profitability of overseas projects due to recovery from the impact of COVID-19, despite decrease in revenue







Net sales



Energy Solution & Marine Engineering

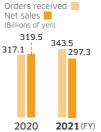
Increased due to major orders for construction and operation of domestic municipal waste incineration plants and other projects

submarines for the Ministry of Defense in Ship & Offshore Structure and decrease in combined cycle power plants (CCPP) in Energy and other factors

Operating | Decreased due to a decrease in revenue and rising raw material prices

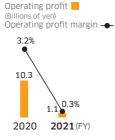
Net sales breakdown





Orders received

271.8



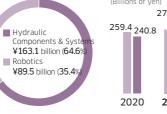
Precision Machinery & Robot

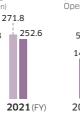
ncreased due to an increase in various robots, including robots for semiconductor manufacturing equipment

Increased due to an increase in various robots, including robots for semiconductor manufacturing equipment and foreign exchange gains resulting from the depreciation of

Increased due to an increase in revenue and other factors

Net sales breakdown







Operating profit

Motorcycle & Engine

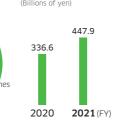
Increased due to an increase in motorcycles for North America, Europe, and Southeast Asia, and an increase in general-purpose gasoline engines for North America

Increased due to an increase in revenue, depreciation of yen compared to the previous period, and other factors despite rising raw material and parts prices



Off-road

four-wheelers/PW ¥108.8 billion (24.3) ¥68.2 billion (15



Net sales





/ Aerospace Systems

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

While this segment was seriously impacted by the spread of COVID-19, prospects are finally looking up, driven primarily by a full-fledged recovery in air travel demand and passenger footfall. We will endeavor to further enhance profitability by securing revenue in focal business fields, reviews of our technical strategies, and strengthening of our financial standing, while managing our full emergence from the COVID-19 pandemic.



Hiroyoshi Shimokawa President, Aerospace Systems Company

SWOT Analysis by Business

Core Competence (Strengths)	Aerospace Aero Engine	Technological capabilities as a manufacturer of finished aircraft acquired through the defense aircraft business (system integration capabilities) Technological capabilities based on international joint development with Boeing, and sophisticated, large-scale production facilities High quality and productivity through the Kawasaki Production System (KPS) Sophisticated technological capabilities built through international joint development projects and developing engines for defense aircraft High quality and productivity through leading-edge production technology
Challenges (Weaknesses)		• High degree of reliance on specific customers (high-volatility revenue structure) • Businesses that require large volumes of invested capital
Opportunities	Defense Aircraft Commercial Aircraft Aero Engine Shared	Increase in defense budget and ongoing development and production of domestically-manufactured defense equipment Prospects of defense equipment exports Medium- to long-term growth in air passenger and air freight volume in line with economic growth in emerging countries Increase in demand as a result of long-term growth in the commercial aircraft market Decarbonization of the aircraft industry
Risks (Threats)	Defense Aircraft Commercial Aircraft Aero Engine	 Reduced equipment prices due to defense budget streamlining Decrease or slow recovery in passenger demand due to the COVID-19 pandemic Fiercely competitive environment, reflecting competition for market share between Boeing and Airbus Rise of manufacturers in emerging countries Decrease or slow recovery in passenger demand due to the COVID-19 pandemic Development risks related to introducing cutting-edge technologies

Initiatives to Achieve Group Vision 2030

A safe and secure remotely connected society	•Expanding the PCR testing business (network use with customers involved in international travel, mainly airlines)	⇒ P.33
Near-future mobility	•Developing vertical take-off and landing (VTOL) aircraft to link logistics bases and cover the last mile •Realizing urban transportation that seamlessly connects people and freight	⇒ P.35
Energy and environmental solutions	•Studying CO ₂ -powered (hydrogen-fueled) air transportation systems	▶ P.27

Other Concrete Initiatives

Securing stable revenue in core business	•Reducing costs for existing orders for aircraft from Boeing and for Aero Engine for commercial aircraft to secure profit •Steadily promoting existing developmental orders and mass production contracts for defense aircraft and helicopters
Revising technology strategy in accordance with market changes	•Rebuilding R&D in line with the future vision •Initiating development of environmental technologies for a decarbonized society leveraging the NEDO Green Innovation Fund
Strengthening the financial base	• Reviewing the fixed cost structure • Reducing inventories through production innovation

Kawasaki Report 2022 Kawasaki Report 2022

/ Rolling Stock

A railway systems manufacturer that meets customer needs by delivering the highest standard of technology

Kawasaki successfully achieved a surplus for the first time in five years in fiscal 2021 as a result of reaping the rewards of structural reforms undertaken to date. We will continue to strive for improved profitability through efforts including a strengthening of our non-price competitive prowess leveraging our technological capacities and expanding our aftersales service business.



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

SWOT Analysis by Business

Core Competence (Strengths)		High-tech expertise built on comprehensive heavy industry strengths leveraging synergies with other business areas Ability to fulfill contracts cultivated from extensive domestic and overseas track record Partnership capabilities with other companies in execution of overseas projects (Kawasaki Initiative)
Challenges (Weaknesses)		 Small business scale in comparison with major overseas competitors Business model centered on rolling stock supply (fulfilling railway system needs through facility to engage in external partnerships)
Opportunities	Domestic Market	•Replacement demand for rolling stock
	Asian Emerging Nations Market	• Demand for urban transportation infrastructure
	North American market	• Demand for subway and commuter train rolling stock
	Common to all Markets	$\hbox{-} Expanding stock demand across markets, including that for components, maintenance contracts, and repair and rebuild work for rolling stock$
Risks (Threats)		Delays in construction timetables due to spread of viral infections; revisions in investment plans of railways operators, etc. Substantial increase in mechanical equipment and materials costs Country risk in new markets for Kawasaki

Initiatives to Achieve Group Vision 2030

A safe and secure remotely connected society	•Streamlining of rolling stock and rail track maintenance, promotion of condition monitoring projects aimed at automation and labor saving	-
Near-future mobility	•Achieving railways mobility which seamlessly connects people and commodities	⇒ P.35
Energy and environmental solutions	Catering to carbon-neutral needs for internal combustion rolling stock	⇒ P.27

Other Concrete Initiatives

Reforming manufacturing system for North America	•Achieving clean manufacturing processes, productivity, and improvements in quality in the North American market, with the support of head office divisions and other companies
Achieving quality levels trusted by customers	Improving management quality using TQMContinuing use of Kawasaki Production System (KPS) with a view to management reform
Expansion of component and aftersales service sales and of maintenance businesses	•Expansion of aftersales remote monitoring service for rail tracks in North America •Expansion of sales of rolling stock condition monitoring equipment for domestic railways operators

/ Energy Solution & Marine Engineering

Responding to diverse needs with superior manufacturing and engineering expertise

With the world orienting itself toward achieving low/decarbonized societies, this segment, which specializes in energy and environmental solutions, is enjoying favorable prospects. Meanwhile, it has suffered significant impacts from the rise in steel material costs in ship building. While the environment business is being buffeted by turbulent waves of change, the achievement of appropriate risk management strategies is spearheading recovery in growth and profitability.



Tatsuya Watanabe President, Energy Solution & Marine Engineering Company

SWOT Analysis by Business

Core Competence (Strengths)	Shared Energy Plant Marine machinery Ship & offshore structure	 Hydrogen storage, transportation, and use (power generation) technology Ability to provide solutions leveraging synergy from combining Kawasaki-brand products Locally-aligned sales structure facilitated by the leveraging of overseas sites Integrated engineering prowess acquired and refined through projects Streamlining of capacities for business proposals for all optimal propulsion systems, centered on core components Energy-saving, environmental burden-reducing technologies, and ability to develop new ship designs
Challenges (Weaknesses)	Energy Ship & offshore structure	Recognition in overseas markets Cost competitiveness in commercial vessel building
Opportunities	Shared Energy Plants Energy	 Acceleration of trend to realize the goal of carbon neutrality, including strengthening of environmental regulations Growing demand for energy and infrastructure in emerging and resource-rich countries Growing demand for distributed high-efficiency natural gas-fueled power generation facilities prompted by the growing need for low-carbon solutions Demand for CO₂-free power generation facilities for new installations and facility replacement
Risks (Threats)	Shared	Confusion in the material procurement network and logistics accompanying measures to prevent the spread of infections, including lockdowns Weakening investment appetite paralleling economic slowdowns in emerging countries and resource-rich countries Energy policy trends in respective countries (taxonomy regulations, amendments to subsidies systems, changes accompanying geopolitical risks, etc.)

Initiatives to Achieve Croup Vision 2020

Initiatives to Achieve Group vision 2030 *1 Autonomous Underwater Vo		
A safe and secure remotely connected society	 Promoting the uptake of the Successor-G remotely-operated robotic system that enables diverse work styles Providing solutions for disaster response, such as stand-by gas turbines Promoting the automation of waste incinerator operation Developing AUVs*1 (SPICE) 	-
Near-future mobility	Promoting the uptake of electric and hybrid propulsion systems (gas engine hybrid-propelled/battery-propelled) for environmentally-friendly vessels Demonstration testing of advanced safety berthing support system	▶ P.35
Energy and environmental solutions	Quickly establishing a hydrogen supply chain (production, transportation, storage, utilization) Accelerating initiatives aimed at the realization of a hydrogen-based society by working with stakeholders Installing gas turbines and gas engines for supply-demand balancing and distributed power generation to support the use of renewable energy Undertaking development aimed at the practical application of carbon recycling technology	▶ P.25

Other Concrete Initiatives

*2 Dry Low Emission *3 Marine Hydrogen Fuel System

• Enabling zero emissions during service navigations by

means of propulsion systems for the world's first pure

· Enhancing response to increased ammonia demand by

means of continuous supply of new-model LPG vessels

battery tanker to operate completely on electricity

Developing solutions to contribute to the achievement of low/ decarbonized society

- Improving profitability by means of sales expansion for 7.8MW-class gas engines, which boast world-leading electrical efficiency in their class, as well as 5MW-class gas turbines Dealing with demand for municipal deteriorating waste disposal facilities and contributing to reducing CO₂ by means of prolonging their lifespans and energy conservation
- First Japanese manufacturer to develop 40%-hydrogen mixed-fuel technologies in DLE*2 combustion gas turbines and 30%-hydrogen mixed-fuel technologies in large gas engines of 5MW-class and above Commencing talks with RWE Generation SE towards realizing demonstration tests for 100% hydrogen power generation using 30MW-class L30A gas turbines

Proving liquefied hydrogen maritime transport by means of

- completion of round trip between Japan and Australia by liquefied hydrogen carrier

capable of carrying liquefied ammonia gas

 Start of development of marine hydrogen-fueled engines MHFS*3, by joint corporation "HyEng," which aims to promote widespread uptake of hydrogen-powered shipping under the "Large scale Hvdrogen Supply Chain Establishment project" selected for the NEDO Green Innovation Fund

Kawasaki Report 2022 Kawasaki Report 2022

/ Precision Machinery & Robot

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

Kawasaki continued to achieve high-level business performance in fiscal 2021, as was the case in the previous fiscal year. While unfavorable conditions such as stagnation in the Chinese market, substantial increases in material costs, and difficulties in procuring electronic components prevailed, our world-leading motion control technologies in this segment are furthering initiatives to inform the future of people and society. We thus intend to leverage these technologies to facilitate significant contributions to eliminating the societal challenge of manpower shortfalls and the promotion of a remotely-connected society.



Hidehiko Shimamura President, Precision Machinery & Robot Company

SWOT Analysis by Business

	Hydraulic Components & Systems	•Accumulated world-class, leading-edge technology, systemization capabilities, and brand power in the area of excavator hydraulic machinery •Ability to respond to customer requests
Core Competence (Strengths)	Robotics	 Ability to develop applications and make system proposals closely matched to specific customer needs Diverse production sites within the Group as a comprehensive heavy industries enterprise Ability to create new technologies and new fields in such areas as medicine and remote control technology
	Shared	•New product development capabilities in the field of motion control based on the integration of hydraulic technologies and robotics
Challenges (Weaknesses)	Hydraulic Components & Systems	•Sales expansion for aftersales service business
(**************************************	Robotics	•Need to expand business to realize merits of scale
	Hydraulic Components & Systems	•Expanding demand due to worldwide infrastructure building, mainly in emerging countries •Need to expand sales in such fields as agricultural machinery and forestry machinery
Opportunities	Robotics	 Increasing fields of application through the realization of collaboration between humans in work operations Rising demand aimed at preventing infection, eliminating labor shortages, and improving quality Progress in use of robots beyond industrial applications (such as medical treatment and nursing care)
	Hydraulic Components & Systems	•Emergence of competing manufacturers and intensifying competition in the Chinese construction equipment market
Risks (Threats)	Robotics	•Increasingly fierce competition with rival companies
	Shared	 Weakening investment appetite due to viral pandemic Procurement issues reflecting substantial increases in materials and logistics costs and confusion in the supply chain

Initiatives to Achieve Group Vision 2030

A safe and secure remotely connected society	 Developing healthcare-related businesses, such as the hinotori™ surgical robot system and fully automated PCR testing robot system Building the remote robot platform business connecting people who want to work with businesses seeking labor 	▶ P.33
Near-future mobility	•Creating delivery robots to link logistics bases and cover the last mile	▶ P.35
Energy and environmental solutions	• Developing hydrogen fuel-related products •Increasing the efficiency of hydraulic machinery and systems	⇒ P.27

Other Concrete Initiatives

Developing electrification and automation technologies for construction machinery	•Developing and supplying the latest hydraulic machinery and systems for electrification and automation to support customers' development of future-oriented construction machinery	
Developing hydrogen-related products	*Developing high-pressure hydrogen valves for fuel cell vehicles, hydrogen supply systems, and hydrogen compressors	
Promotion of open innovation	Developing markets and complementing strengths through collaboration with other companies in the same and other industries so as to reinforce competitiveness and promote differentiation Accelerating the development and launch of new products through collaboration with start-ups Strengthening elemental technologies and accelerating new product development through collaboration with academia and government	

/ Motorcycle & Engine

Let the good times roll Kawasaki delivers the ultimate in excitement

In fiscal 2021, this business made significant breakthroughs, including but not limited to recording its highest net sales and operating profit to date. In addition to the leisure boom occasioned by the COVID-19 pandemic, Kawasaki is now reaping the rewards of our sustained efforts to strengthen the brand power. Kawasaki will continue to pursue further growth oriented by our company mission to "Let the good times roll."



Hiroshi Ito Representative Director, President and Chief Executive Officer,

SWOT Analysis by Business

Core Competence (Strengths)		Sales and marketing capabilities that realize unique, premium brands Development, production, procurement, and quality assurance capabilities that create products embodying both heritage and innovation Global production, sales, and service structure Advanced technology expertise built on comprehensive heavy industry strengths leveraging synergies with other companies in the Kawasaki Group
Challenges (Weaknesses)		•Securing production capacity to respond to rapidly rising demand •Building agile organizational structures that can respond to rapid change
Opportunities	Motorcycles Off-road four-wheelers/ PWC General-purpose engines Shared	Stable demand in developed countries Medium- to long-term market expansion in emerging countries Market expansion in North America reflecting growing demand for outdoor leisure Firm growth, reflecting U.S. housing market expansion Collaborations and alliances with other companies Shift toward electrification
Risks (Threats)	Motorcycles Off-road four-wheelers/ PWC Shared	Expansion into the leisure sector by brands from emerging markets, such as China and India Intensifying price competition due to aggressive measures by the North American manufacturers Intensifying price competition in the North American market Rising customs tariffs accompanying intensification of U.SChina trade friction Increasing geopolitical risks in Europe due to the Russian invasion of Ukraine Attenuating demand due to global inflation and tightened monetary policies, including increased interest rates in the United States Continuing confusion in the supply chain and substantial increases in logistics and materials costs Tightening environmental regulations

Initiatives to Achieve Group Vision 2030

A safe and secure remotely connected society	Providing advanced rider and driver support Providing disaster response solutions	-
Near-future mobility	• Realizing a society equipped to achieve the safe environmentally-friendly mobility of people and commodities • Commercializing new modes of mobility towards the elimination of manpower shortages in the logistics field	▶ P.35
Energy and environmental solutions	• Making use of hydrogen fuel • Shifting to battery electric vehicles/hybrid electric vehicles	⇒ P.27

Other Concrete Initiatives

Product supply to meet market demand as much as possible	 Bringing all hands-on deck to meet production plans Ensuring that if supply shortages like that in semiconductors or logistics disruptions impair production, production and sales plans can quickly adapt to the components available
Expansion of the off-road four-wheeler business	 Investing in development toward the enhancement of product competitiveness Continuing to increase capacities of plants in the United States and preparations toward start of operations at new Mexican plant
Decarbonization/ electrification solutions	 Promoting development toward marketing electric power and hybrid models Beginning of joint research on hydrogen engines by Toyota, DENSO and the four two-wheeler companies
Strict control of fixed costs to slim down management	•Mitigation of fixed costs backed up by specific policies •Reinforcing R&D

Kawasaki Report 2022 Kawasaki Report 2022