Chapter 2

# Driving Innovation to Stay Ahead in a Changing World

**2019–202**1

Finding itself in a rapidly changing business environment, the Kawasaki Group implemented a series of reforms under the banner of "Changing Forward." In 2019, it launched its Medium-Term Business Plan (MTBP) 2019 (FY2019-2021). Moving toward its primary goal of "balancing autonomous business management and company-wide corporate governance," Kawasaki introduced a divisional system and changed its corporate structure from that of a company with a board of corporate auditors to a company with an audit and supervisory committee. On top of that, it spun off the rolling stock business as well as the motorcycle and engine business into new companies. COVID-19 began to spread globally in the early 2020s. This spread brought business across the world to a near standstill as the transportation of people and goods came to a grinding halt and supply chains suffered massive disruptions. Working against this backdrop, the Kawasaki Group saw aerospace and rolling stock orders spiral downward, resulting in year-on-year decreases in sales and profits in fiscal 2020.

In the meantime Kawasaki adopted the Group Vision 2030: Trustworthy Solutions for the Future in November 2020. The company identified three areas it should focus on in order to achieve the vision of a safe and secure remotely connected society, near-future mobility, and energy and environmental solutions.

Kawasaki was determined to leverage its diverse range of unique technologies and work hard to overcome the hurdles created by the COVID-19 pandemic while solving a myriad of problems facing the world as it kept its eye on achieving a sustainable society.

1.

## **Transforming the Organization and Corporate Culture**

### 1) Formulation of MTBP 2019

Kawasaki saw the profitability of some of its businesses significantly drop during the period of the MTBP 2016 medium-term business plan that ended in fiscal 2018 and urgently needed to strengthen its financial base. On the other hand, the businesses that were driving growth were about to reap returns as expected on investments that had been made on an ongoing basis.

It was against this backdrop that Kawasaki launched its MTBP 2019 in April 2019. The plan envisioned a fiscal 2030 operating income margin of 10% or more (with annual sales growth of 5% or more) in light of megatrends in the business environment and the SDGs. The company decided to make selective investments over the three years of the MTBP 2019 by placing the most emphasis on strengthening its financial base in order to achieve further growth. The outline of the plan is as follows.

- (i) Strengthen the financial base Return to the philosophy of emphasizing quality over quantity to improve operational quality (including project risk management), and strengthen the financial base toward future growth
- (ii) Total optimization of business portfolios
   Balance autonomous business management and company-wide corporate governance
   Implement carefully selected investments of labor, resources, and budgets, from the viewpoint of total optimization. Consider megatrends and SDGs. Clarify each business's role, optimal scale,
- (iii) Business model innovation ("Changing Forward")

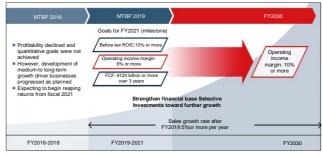
  Make good use of core competencies to increase enterprise value through business and value chain innovations (without sticking to in-house development and production)
- (iv) Innovate company organization/culture ("Changing Forward")
   Construct cross-organizational functions and management systems for total optimization and a company culture to face evolving challenges



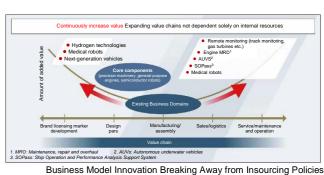
Group report on the MTBP 2019



Press conference announcing the MTBP 2019



Long-Term Vision and the MTBP 2019



(Changing Forward)

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#### [Management Targets (FY2021)]

Management Targets (1-12021)]		
Before-tax ROIC*1	10% or more	
Ratio of operating	6% or more	
income to sales	(100 billion yen or more)	
FCF*2	120 billion yen or more	
rcr	over 3 years	

<sup>\*1</sup> ROIC = EBIT/invested capital (i.e. shareholders' equity + interest-bearing debt
\*2 FCF before spending on growth investment

	 0	0			

Company	Division	
Ship & Offshore Structure Company	Naval and Special Ship Business Division Merchant Ship Business Division	
Rolling Stock, Construction Machinery & Crushing Plant Company	Domestic and Asian Business Division North American Business Division	
Aerospace Systems Company	Aerospace Business Division Aero Engine Business Division	
Energy System & Plant Engineering Company	Energy Solutions Business Division Plant Engineering Business Division Marine Machinery Business Division	
Motorcycle & Engine Company	Motorcycle Business Division 4 Wheel & PWC Business Division General Purpose Engine Business Division	
Precision Machinery & Robot Company	Precision Machinery Business Division Robot Business Division	



Chairman Kanehana (left) and President Hashimoto (right)

#### [Key Measures]

<Reinforce earning power and corporate strength ahead of fiscal 2021>

- Improve earning power and free cash flow
- Strengthen project risk management/quality control systems
- Clarify the position of each business via a portfolio and rebuild them
- Innovate business models by breaking away from insourcing policies
- Innovate company organization/culture and implement K-Win activities

<Achieve quantitative goals with FY2021 as a checkpoint>

- Achieve goals through profit & loss/cash flow quantity models
   Spell out long-term policy for years up until FY2030>
- Growth vision for FY2030
- · Megatrends in Kawasaki's markets/SDGs
- Achieve discontinuous innovations

Although the outlook for the global economy was uncertain due to the trade friction between the United States and China and the slowdown of the Chinese economy, Kawasaki decided to invest in growth businesses with an eye to fiscal 2030 while moving forward to achieve its management goals. The company also started looking at its vision for 2030 (Kawasaki Vision).

### 2) Introduction of a Divisional Organizational Structure

Kawasaki focused on ensuring both autonomous business management and company-wide corporate governance under the MTBP 2019. As part of this policy, it introduced a divisional organizational structure in April 2020. This involved reorganizing 28 business units into 14 strategic divisions of the company-wide business portfolio and appointing division heads who would be in charge of executing the operations of their respective divisions.

### 3) Inauguration of Yasuhiko Hashimoto as President

In June 2020, Kawasaki's president, Yoshinori Kanehana, became its chairman, and Yasuhiko Hashimoto, its senior executive vice president, became president. Hashimoto had worked on the development of industrial robots and taken charge in the launch of a robot business for semiconductor manufacturing equipment as well as the establishment of Medicaroid Corporation, a company that develops medical robots.

In assuming the position of president, he stated, "I have the responsibility to chart a course for the future and take steps needed to enhance our potential as a company while continuing the reforms former President Kanehana has implemented so far." He also proclaimed his commitment to tackling the issues facing society with speed while keeping an eye on the market.

### 4) Transition to a Company with Audit & Supervisory Committee

Kawasaki changed its status from a company with a board of corporate auditors to a company with an audit and supervisory committee following the approval of its shareholders at their ordinary general meeting on June 25, 2020. The transition was designed to give the Board of Directors more input on management strategies and other matters and enable them to respond swiftly to rapid changes in the business environment while further strengthening its supervisory function. This change delegated a significant portion of the authority to make business decisions to executive directors and executive officers appointed by the Board of Directors and added greater agility to the decision-making process. At the same time, the composition of the Board of Directors was also changed. The percentage of outside directors was increased to make management more agile and efficient as well as ensure transparency. As of October 2021, six of the 13 directors were outside directors. In order to ensure the board maintained a diverse perspective, two women and one non-Japanese national were appointed as members.

Structure after Transition to a Company with an Audit & Supervisory Committee

an Madit & Supervisory Committee			
Before transition			
11 directors	Inside	8	
11 directors	Outside	3	
5 comporate auditors	Inside	2	
5 corporate auditors	Outside	3	



After transition					
13 directors	Directors who are	Inside	5		
	not Audit & Supervisory Committee Members	Outside	3		
	Directors who are	Inside	2		
	Audit & Supervisory Committee Members	Outside	3		

Part 2/The Last 25 Years (Overall History)

Chapter 4 Driving Innovation to Stay Ahead in a Changing World

### 2.

### **Implementing Group Vision 2030**



Group Vision 2030 and the three key themes that drive the Group's efforts to achieve it

### 1) Formulating Group Vision 2030

In November 2020, Kawasaki adopted a new vision statement, the Group Vision 2030: Trustworthy Solutions for the Future, describing what the Group envisioned itself becoming by 2030. Group Vision 2030 embodies the corporate message, "changing forward," which Kawasaki announced in 2017. It underscores the Group's commitment to providing timely and innovative solutions in an ever-changing world in order to build a future full of hope. It promises to go beyond organizational and divisional boundaries in taking on new challenges and expand the horizon of possibilities to sow the seeds for further growth. The company picked three key themes that drive its efforts to fulfill Group Vision 2030.

## Frontier Pioneering the technology frontier with our challenger "DNA"

We will continue to respond to the frontier of the new era's social challenges, based on the unique perspective of challengers we've always had since our founding, in order to create a hopeful future.

### New Values Providing innovative solutions to the problems facing the world

We are committed to providing solutions with new and high added value to a wide range of customers and society, by concentrating the trustworthy technologies and knowledge that we have been building in order to provide innovative solutions and to speedily accommodate social change.

### Cross Over Becoming a creative challenger that continues to grow by breaking barriers

To provide innovative solutions focused on social challenges, we will continue to be an open-minded, free-thinking, and creative team that goes beyond the boundaries of internal and external organizations and of product/service categories, leveraging our rich diversity.

The company identified three areas it should focus on in order to achieve this vision, including a safe and secure remotely connected society, near-future mobility, and energy and environmental solutions. A safe and secure remotely connected society: Applying remote control and robot technologies in various fields such as medicine, healthcare, manufacturing, and industrial infrastructure to make "working from a remote place" possible with an eye to achieving a safe and secure society and proposing new ways of working and living. And in addition, providing solutions that will protect lives and property from disasters that have been a common occurrence in recent years.



Group Vision 2030 initiatives

Near-future mobility: Combining technologies for aircraft, off-road four wheelers, robots, and more to develop new forms of mobility, such as remotely controlled, unmanned transport helicopters and self-driving delivery robots, to offer smart society solutions that use new modes of transport and travel, including solutions to the last-mile delivery challenge.

Energy and environmental solutions: Leading the world in building a hydrogen supply chain for the production, transportation, storage, and utilization of hydrogen, developing CO<sub>2</sub> separation and capture technology, electrifying transportation systems, and more to help achieve a sustainable, carbon-neutral future.

### 2) Transitioning to a Business Structure for Creating Solutions

In addition to focusing on the three fields noted above, Kawasaki decided to operate businesses within the three areas of Land & Air Transportation Systems, Motion Control & Motor Vehicles, and Energy & Marine Engineering to create solutions and allow business segments to collaborate more effectively. The company also transformed via major organizational changes. In April 2021, it merged the Ship & Offshore Structure Company and the Energy System & Plant Engineering Company to establish the Energy Solution & Marine Engineering Company, with the aim of strengthening competitiveness through synergies among the hydrogen, marine, and engineering businesses.

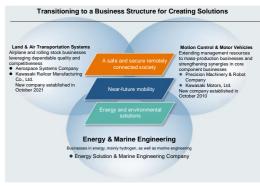
Parallel to this restructuring, the company spun off its Rolling Stock and Motorcycle & Engine Companies as separate companies in order to ensure the autonomous management of each.

### 3) Spinning off Rolling Stock and Motorcycle & Engine Businesses

#### Establishing Kawasaki Railcar Manufacturing Co., Ltd.

Kawasaki Railcar Manufacturing Co., Ltd. was established on October 1, 2021. Rail systems are an environmentally friendly means of public transportation intertwined in people's daily life and can contribute in a big way to carbon neutrality. The market was expected to grow at a relatively stable pace across the globe, as illustrated by the growing need for rail services that accompanied economic development in countries across Asia.

Having established an organizational structure that would enable it to quickly and flexibly work with other industry players in this growing market, Kawasaki Railcar Manufacturing adopted the following corporate philosophy: "We pledge to ensure day-to-day safety and to bring about an exciting future by constantly tackling challenges in craftsmanship and technological innovation."



Transitioning to a Business Structure for Creating Solutions



Dhaka Mass Transit Company Limited's Dhaka MRT Line-6 in Bangladesh

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Hybrid motorcycle under development by Kawasaki Motors, Ltd.



Off-road four wheele

#### Establishing Kawasaki Motors, Ltd.

Kawasaki Motors, Ltd. was established on October 1, 2021. The power sports business, selling motorcycles and off-road four wheelers, and general-purpose engine business were experiencing a once-in-acentury transformation with CASE.\* They were also making headway on compliance with environmental regulations and partnerships in electrification and advanced safety technologies. The power sports business was a Kawasaki Group core business and its only B2C business, and required flexible and bold decision-making. Working against this backdrop, Kawasaki Motors focused on keeping its operations flexible, creating stores based on the concept of "enjoying with five senses," and offering products and services that were tailored to customer needs in order to build a stronger brand and achieve sustainable growth.

\* CASE stands for Connected, Autonomous/Automated, Shared, and Electric

#### 4) Introduction of a New Personnel System

In April 2021, Kawasaki overhauled its personnel system. Aiming to achieve Group Vision 2030, the company introduced a brand new personnel system that would enable the people that made up its diverse workforce to maximize their abilities and produce high added-value results. It adopted a new approach and framework of compensation and evaluation that placed greater emphasis on abilities, roles, and achievements to enhance its ability to respond quickly to changes in society.

Built around the concept of "challenge and commitment" (setting challenging goals in addition to minimum goals and accomplishing them with speed and determination), the new personnel system was designed to foster a culture that encouraged employees to try new things.

### Job-based System Boosts Employees' Desire to Grow

For senior officials, the company adopted a job-based system, in which salary and compensation were determined on the basis of their roles, such as the duties they should perform and results they should achieve. The breadth of jobs associated with all positions in the company was measured by clarifying the required knowledge, experience, responsibility for achieving expected results, etc. The company applied job ranks that were based on this to raise awareness about the new personnel system.

The company also designated certain individuals as corporate executives, from among those who perform important corporate duties and those who possess outstanding behavioral characteristics, to be evaluated, trained, and assigned with a bigger corporate picture in mind.

This would facilitate active exchange among employees and bridge the chasm between internal companies while unleashing potential synergies between businesses as the company aimed to continuously enhance its enterprise value.

### Assigning Employees with the Right Stuff and Developing Next Generation Leaders

For general employees, seniority, including age, and employment history was off the board. The new system placed greater weight on individual abilities. Kawasaki could now quickly find and promote outstanding young employees in a system that motivated young employees to further their professional development while still enabling veteran employees to thrive in the workplace regardless of their age.

The new system also integrated categories E (clerical and technical positions) as well as R (planning management and development positions) and created category V (planning and professional positions) while merging full-time positions into category G and partner employees into category A (clerical positions). This realignment of positions and professional qualifications into larger categories would provide employees with opportunities to work a wider range of jobs and help them gain extensive experience while recognizing employees who performed more difficult tasks.

### 5) Launching Presidential Projects

Moving toward achieving the objectives of Group Vision 2030, Kawasaki went beyond the boundaries of its individual internal companies to leverage the Group's strengths as a whole. This included implementing a series of company-wide reforms and establishing the Presidential Project Management Division in January 2021. It set up various organizations dedicated to PCR testing services, near-future mobility, and more in order to quickly create new businesses that transcended the frameworks of its internal companies.

The Presidential Project Management Division consisted of the Project Promotion Department, Administration Department, PCR Supervisory Department, Advanced Smart Mobility Supervisory Department, and eWork Business Group (newly established in February of the same year), where many employees appointed from across all internal companies could pursue synergies that crossed the boundaries of the internal companies.

#### **Initiatives of the PCR Supervisory Department**

In early 2020, the novel coronavirus (COVID-19) began to spread around the world. In April of the same year, the Japanese government declared a national emergency.

Kawasaki and its subsidiaries, Medicaroid and Sysmex Corporation, jointly developed an automated robotic PCR testing system that fully automated processes involving the risk of infection. Following the launch of the first testing service at Fujita Health University in March 2021, Kawasaki started offering a testing service for local governments in May and for international passengers departing from Kansai International Airport in September.



Automated robotic PCR testing system

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K-RACER unmanned VTOL aircraft



Automated delivery robot



Suiso Frontier liquefied hydrogen carrier



Artist's rendering of the pilot scale test facility at the Maizuru Power Plant (Photo: Kansai Electric Power Company Inc.)

### Initiatives of the Advanced Smart Mobility Supervisory Department

In August 2021, Kawasaki was commissioned by Ina City, Nagano Prefecture to build a platform for transporting cargo to locations deep in the mountains using the K-RACER unmanned VTOL aircraft. The company also developed an automated delivery robot designed to achieve smooth, stable operations even on rough and bumpy roads and conducted testing at a hospital and in urban areas. In November 2021, the company successfully completed proof-of-concept testing for unmanned cargo transport using its K-RACER and delivery robot with the aim of helping to solve societal issues such as labor shortages in the logistics industry.

#### Initiatives of the e-Work Business Group

In December 2021, Kawasaki and the Sony Group Corporation established Remote Robotics Inc., a joint venture for remote robot platform businesses. The joint venture started demonstration tests with an aim to build remote control platforms for robots utilizing the advantage of both companies.

#### 6) Initiatives for a Decarbonized Society

In 2010, the Kawasaki Group publicly announced its plan to build a CO<sub>2</sub>-free hydrogen supply chain for the international transport of lowcost hydrogen produced overseas in order to meet growing expectations for hydrogen-related businesses that hold the key to achieving a decarbonized society. In 2018, with the support of the Japanese and Australian governments, the Group started working with partner companies to demonstrate its technology for building an international supply chain designed to liquefy hydrogen produced from Australian brown coal and transport it to Japan. In 2022 Kawasaki became the first in the world to successfully transport liquefied hydrogen internationally. In 2021, a commercialization demonstration project aimed at making the transport of hydrogen more economically feasible by increasing the size of equipment and facilities was adopted as a Green Innovation Fund project. Efforts are underway to achieve an annual supply of 225,000 tons when the supply chain becomes available for commercial use in 2030. Kawasaki has also announced that it would aim for achieving carbon neutrality on its own at its domestic plants by 2030 through initiatives centered on hydrogen power generation.

In addition, the company and the Research Institute of Innovative Technology for the Earth (RITE) will start a joint pilot demonstration at the Kansai Electric Power Company Inc.'s Maizuru Power Plant in 2023 under the New Energy and Industrial Technology Development Organization (NEDO) project for applied research on coal combustion waste gas and advanced carbon dioxide solid absorption materials. The energy-saving carbon dioxide separation and capture system used in the demonstration is expected to be a next-generation  $CO_2$  separation and capture technology because it has the potential to significantly reduce the energy required for  $CO_2$  separation and capture compared to conventional technologies.

### 7) Trustworthy Solutions for the Future

Kawasaki aims to create a new world via each of the three key focuses of its Group Vision 2030: a safe and secure remotely connected society, near-future mobility, and energy and environmental solutions. The hydrogen business will not only produce products that are compatible with hydrogen fuel, but also create a clean hydrogen-powered society. Near-future mobility will focus on creating a society with new transportation and logistics systems tailored to changes in the movement of people and goods. This also means shifting from conventional manufacturing to selling services, i.e., shifting to the business model of providing solutions that meet the changing needs of society. In order to make that possible, Kawasaki will bolster partnerships with government agencies and other companies as it works to build a network of like-minded partners.

Today, the world is facing multiple problems, including climate

Today, the world is facing multiple problems, including climate change, resources, poverty and hunger, aging populations, and a shrinking workforce. On top of that, the spread of COVID-19 is having a tremendous impact on people's health and economies around the world.

Working in a global environment, the Kawasaki Group will continue to explore market wants and how it can satisfy those wants as it strives to quickly deliver needed solutions. The Group's social role and responsibility is to do its best to achieve a sustainable society by providing solutions that meet the needs of all. All of Kawasaki's businesses will continue to make a change for the better and do everything necessary to create the kind of new customer value the world needs as it moves forward to provide "Trustworthy Solutions for the Future."



Ceremony to commemorate the completion of the Japan-Australia supply chain for large-scale marine transportation of brown coal-derived hydrogen