

Message from the Executive Officer in Charge of Technology Development and DX

## Further enhancing the competitiveness of our existing businesses and creating new value.

Hiroshi Nakatani

Representative Director,  
Senior Corporate Executive Officer,  
Assistant to the President, in charge of Technology,  
Production, Procurement, TQM, General Administration,  
Digital Transformation (DX) Strategy,  
and the North America Project Management Task Force,  
and General Manager, Corporate Technology Division



### / Outlining a future-oriented growth strategy

For the Kawasaki Group to establish sustainable growth, it is important to enhance the profitability of our existing businesses and to take a medium- and long-term perspective on laying the groundwork for developing the technologies for new products and businesses. We are identifying the technologies that will be needed 10 and 20 years in the future and outlining future-oriented strategies so we can get an early start on preparing for future needs.

That is the approach we took when envisioning the future of our hydrogen businesses. A little over 10 years ago, we looked ahead to future of energy security in Japan and envisioned hydrogen as the area where our Company could provide real value. At the time, many were skeptical that there would be a real need for hydrogen, but now hydrogen is considered a promising energy source for decarbonization and hydrogen-centered businesses are on the verge of becoming viable in many sectors, including power generation and transportation. Based on that experience, when we discuss potential directions for our R&D, we consider all aspects of business and society from how long our current products will continue to be competitive to the issues society will be facing in the future.

In fiscal 2021, we began taking inventory of our technologies and categorizing them as technologies to either keep or discard. We are still in the early stages of consideration and planning, but by focusing on the future for our products and businesses and planning

ahead for the technological evolution, we will strengthen our technological foundation for the future.

### / A new business model to generate greater value

Group Vision 2030 outlines three types of innovation that we will pursue to develop solutions for social issues in the areas of “a safe and secure remotely connected society,” “near-future mobility,” and “energy and environmental solutions.”

The first type is solution innovation, which is core technologies for solution-based business, and the second is product innovation, which is further developing our products and enhancing their competitiveness. Our businesses have been structured around product manufacturing and sales, with some core components driving our overall profitability. Now, we are seeking boost our profitability by extending our business reach upstream and downstream on the smile curve so we can raise value across the whole value chain.

To do that, we will develop technologies that further the evolution of our core components, create a business model that encompasses post-sale maintenance and operation services, and seek to grow our businesses beyond past limitations to provide solutions that create new value for our customers.

### / Process innovation that immediately accelerates sustainable growth

The third type of innovation we are pursuing is process innovation. We are improving management throughout the value chain with total quality management (TQM) and deepening the integration of the Kawasaki Production System (KPS) in our supply chain. In addition, we are standardizing our development and design processes in what we are calling the Kawasaki Design Process Transformation (K-DPX).

We celebrated our 125th year in 2021, and over the more than a century of operations our businesses units have developed their engineering and planning systems that they run in their own way. The ultimate aim of K-DPX is standardize these development and engineering processes. To date, traditional methods will be difficult to leave behind, but the times are rapidly changing, and the Group must also change in order to survive. Standardizing our parts, particularly core parts, will enable us to reduce procurement and quality control costs for the entire Group.

Standardizing our business processes is key to advancing our DX and also will have the benefit of facilitating human resource movement across company boundaries. We consider standardization to be vital for our future and are accelerating our efforts.

### / Fortifying intellectual property activities in our business strategies to add further value

While advancing our technology development and DX, we are also focusing on stepping up our intellectual property activities. Intellectual property is one of our core management resources, and we are seeking to establish and foster intellectual property activities linked to the complete cycle from early development through business strategy.

In the hydrogen businesses, for example, we have an intellectual property strategy for competition and co-creation. Hydrogen is an emerging field, and we cannot grow our business without first expanding the market. To develop the market, a balance of both open and closed intellectual property will be needed, and assistance from the industry and the government will be indispensable.

We will not rely solely on developing technologies ourselves but will also engage in open innovation to bring in and jointly develop leading technologies. Our process will be to envision future changes in society and what type of services and products will be needed, identify the technologies that will be needed to create those services and products, and then actively seek partnerships with companies and research institutions with the seeds to realize those technologies.

### / Advancing DX to create new customer value

DX is the linchpin of the three types of innovation that will transform our businesses and processes. The Kawasaki Digital Platform, which unifies all of our data in a digital space, is the foundation on which we are developing new services using digital technology in each focus field.

Our primary focus at this time is on collecting operational data. This is key because data on our robots after they are installed and operating at the customer site will enable us to anticipate malfunctions and provide preventive services through scheduled maintenance for production lines.

To realize new businesses like these, we are stepping up the training and acquisition DX human resources to run the operations and developing the Kawasaki Digital Platform as an ecosystem that will connect us with our customers and suppliers.

### / Cultivating human resources in technology development and strengthening foundational technologies for the future

The Kawasaki Group has introduced numerous firsts to Japan and the world. The areas of technological advances change with the times, but it is always people who create the technology. The products we produce and the services we provide are becoming increasingly diverse and sophisticated, and I believe that human resources are becoming more important than ever.

As the Group expands into new fields and new businesses, we will be looking forward to the products, services, and technologies that will be needed in the future as well as the human resources we will need to develop our businesses. We will take inventory of our present technologies and any technologies that we will need but don't have for the future businesses will be positioned as foundational technologies that we will cultivate through open innovation and by acquiring human resources.

The Kawasaki Group is diligently working to fulfill our Group Vision 2030 while also looking beyond to contribute to solutions that meet the increasingly diverse needs of society.