

# Message from the President



We will work to transform through digitalization and to resolve social issues in order to remain a company that is trusted by society and our customers.

Hiromasa Amano

President, Representative Director

# **Management Approaches**

As the new president appointed in June 2021 to lead the Kajima Group forward, I am keenly aware of the responsibilities and expectations that have been placed on my shoulders. I will build on the strategies and management foundation that Yoshikazu Oshimi, the former president and current chairman, put in place and work to deepen existing businesses and expand the business portfolio with the objective of long-term growth for the Kajima Group.

The Kajima Group Medium-Term Business Plan (FY2021-2023) has just started, and we will work to steadily achieve the business targets for the initial year. Management and employees are committed to vigorously promoting the plan's measures, meeting the expectations of stakeholders, and making sure Kajima remains a company that is trusted by society and our customers.

Ever since the start of Kajima's business in 1840, people and technology have been central to its efforts to resolve

social and customer issues. We continuously attract and retain customers by drawing on our technologies to conscientiously meet expectations. Taking a long-term perspective rather than focusing on immediate profits, we grow together with customers by earning their trust through solid proposals and outstanding work. Kajima has operated this way throughout its history, and will continue to do so. Our corporate value is a function of the trust we have earned by nurturing and passing on over many years the technologies that have made us a leader. Our corporate culture embraces continuous technological innovation, a commitment to quality, and sincerity.

In formulating our new Medium-Term Business Plan, we also drafted the Kajima Group Vision to share the Group's targeted direction both internally and externally. We need to attract diverse people and co-create value in collaboration with external resources to grow sustainably given the major changes in the business environment. In recognition of this, our Vision expresses Kajima's ideal of being a company that

energetically incorporates external capabilities such as open innovation into its corporate culture, attracts diverse people who maximize their capabilities, proactively creates new value, and takes on challenges for the future.

Based on our Vision, we will address medium- to long-term issues such as human resource development, response to climate change and reform of our multilayer subcontracting structure. At the same time, we will strengthen our core construction and real estate development businesses, enhance our value chain, and expand into new business areas. In these ways, we will achieve growth qualitatively and quantitatively.

Kajima Group Vision ▶ Pages 16-17

# **Previous Medium-Term Business Plan Review and Market Environment Outlook**

During Kajima Group Medium-Term Business Plan (FY2018-2020), which culminated on March 31, 2021, we diligently implemented initiatives and made investments relevant to medium- to long-term management issues such as concentrated research and development to enhance productivity, applying research findings to and conducting projects for new technologies, and expansion of the distribution warehouse business in the United States and Europe. Achieving our earnings targets for three consecutive years highlighted our performance.

ESG and sustainability are increasingly important management issues. I believe that efforts to address environmental and energy issues, among others, including securing construction personnel and ensuring strict compliance, must be ongoing. Moreover, the global COVID-19 pandemic is not over, so we are placing the highest priority on preventing the spread of infection and protecting our stakeholders in Japan and around the world as we maintain the continuity of our operations.

Regarding the outlook for construction demand, public investment in Japan should continue to be firm due to measures to help the country deal with intensifying natural disasters and aging infrastructure. The outlook for private capital investment in Japan is also favorable. While it will take time for the effects of COVID-19 to dissipate and some projects have been canceled or postponed, demand has been firm, partly due to needs related to redevelopment and renewable energy. Plans for large-scale redevelopment projects in Tokyo are still in place, demand remains significant in Osaka (the city that will host World Expo 2025), and redevelopment projects are scheduled for other major cities. We also see a strong push for capital investment in semiconductor-related projects and markets such as data centers.

We do not expect demand for office building construction to cool suddenly, but the use of space is changing significantly because of social distancing, contactless design, and free address workspaces. Space allocations will have to be expanded to accommodate social distancing if that becomes a normal work style in the post-COVID-19 era. We are

cooperating in research led by RIKEN using the Fugaku supercomputer, and intend to explore what technologies we can provide based on our experience with COVID-19 and what society requires.

Overseas, we anticipate that the Southeast Asian market will need time to return to pre-COVID-19 levels, but economic growth will resume once the pandemic dissipates. The United States still has excellent economic growth potential and remains an important market for the Group. Our construction and real estate development businesses will aggressively serve markets such as rental apartments and distribution warehouses, for which the rise in e-commerce has been driving demand.

## **Digitalization**

Digitalization is of the utmost importance in strengthening the construction business, which is the backbone of the Kajima Group. We will ramp up digitalization in terms of both hardware and software.

Construction industry engineering is more reliant on experience than manufacturing industries are because structures and conditions differ from site to site, with no two exactly the same. Digitalizing the implicit and personal knowledge of the construction process will enable Kajima's people to efficiently share internal wisdom and experience.

Aggregating experiential construction case data and using it effectively improves day-to-day work and the quality of the database. Doing so therefore has a positive effect on safety, environment, quality, delivery, and cost (SEQDC) because it results in faster construction with higher quality and lower cost. That enables employees and the Company to grow, which in turn attracts outstanding people. I would like to create this virtuous cycle. At the same time, aggregating and sharing failure data and examples of troubleshooting can create a key risk management tool.

It is essential that we aggregate and organize the enormous amount of data generated in each construction process and use it throughout the entire construction value chain, from upstream design and development to downstream maintenance and management. We intend to use this valuable data to create new, next-generation businesses.

# Medium-Term Business Plan (FY2021-2023) - Forward-Looking Investment

The subtitle of our new Medium-Term Business Plan is Forward-Looking Investment. It highlights our intention to make aggressive forward-looking investments amid an intensely competitive market for the Group's future growth.

We are targeting consolidated net income of ¥95 billion for fiscal 2023, about the same as for fiscal 2020, to account for the expected impact of the COVID-19 pandemic. Longer term, we are aiming for further growth, with a net income target for fiscal 2024 and beyond of ¥100 billion or more, and ¥130 to

¥150 billion or more for fiscal 2030. The flat earnings that our plan calls for over the next three years will serve as a base for building further earnings in the future. Our focus will be on qualitative growth through means including improved construction processes and on preparations for significant growth in the years ahead. Basically, we intend to maintain earnings at a high level in the domestic construction business while implementing strategies to further increase earnings, while making ¥800 billion in investments, which is higher than the total set in the previous medium-term business plan.

The domestic real estate development business will continue leveraging Group construction technologies to make steady progress in expanding its scope of applications and services and engaging in projects in the Tokyo metropolitan area and major regional cities. The overseas real estate development business will increase investment in the distribution warehouse development business in North America and Europe, where it has already achieved good results. We will deploy the expertise and investment platforms that we have acquired to steadily invest and recoup investments within a cash-to-cash cycle of growing scale and returns.

Our new Medium-Term Business Plan establishes a Strategic Investment Budget of ¥60 billion. In addition to investment to enhance our construction capabilities and expand the entire value chain from development to maintenance and management, strategic investment will also be allocated to promising businesses that help resolve social issues in areas such as environment and energy, smart cities and smart societies, infrastructure management, and business continuity planning (BCP). We will also leverage our global network, ranging from Singapore to Silicon Valley in the United States, as we allocate investment for alliances with companies in different industries and with startup ventures. We plan to be flexible if we have not allocated sufficient funding for the Strategic Investment Budget, which we see as improving corporate value from a long-term perspective.

#### **Strengthen Our Core Businesses**

#### Strengthen Design-Build Capabilities

The proportion of design-build contract awards in total construction contract awards has increased in recent years. Customers think highly of our integrated design-build system, through which our design and engineering departments collaborate and coordinate with construction sites. This system works particularly well for the construction of largescale mixed-use developments, pharmaceutical plants and other projects that require sophisticated engineering. It works just as well for semiconductor plants, data centers and other projects that have short construction timelines. Moreover, projects in our civil engineering business such as construction of offshore wind power generation facilities frequently require the application of engineering capabilities prior to construction.

Initiatives in upstream growth markets and focus markets have become increasingly important. We will enhance our

technology and expertise along with our ability to coordinate and make decisions by linking data upstream and downstream within the construction value chain.

#### Improve Productivity

We want to evolve next-generation construction systems while further accelerating initiatives to improve productivity. We need to digitalize the capabilities of experienced skilled workers to move forward with programs including smart construction, automation, and remote construction. Digitalizing personal skills and knowledge will enable us to improve productivity and pass on such skills. In addition, digital technologies as exemplified by building information modeling (BIM) and construction information modeling (CIM) will contribute to enhanced quality and other benefits by enabling various simulations and real-time data use.

In building construction, we are moving ahead with the development of automation and mechanization technologies. Our initial targets are steel frame welding and fireproof coating application, two types of work that take place under harsh conditions, and are gradually applying these technologies to more construction sites.

Our civil engineering business is now using the A<sup>4</sup>CSEL® ("quad axel") automated construction system that coordinates the remote and automatic control of numerous construction machines. It is currently in operation in Akita Prefecture for embankment casing at the Naruse Dam. We will expand the use of A<sup>4</sup>CSEL to tunnel and road construction to accelerate work flow at those construction sites. This technology also holds promise for use in the construction of a lunar base. We will evolve the automated construction and robotic technologies that we are currently developing to create construction sites that are sophisticated, innovative and attractive to work at. Furthermore, we will take on the challenge of making the dream projects of today into realities.

One look should tell you that our construction sites are completely different than before. The construction industry has been slower than manufacturing to deploy technologies such as automation and robotics. However, progress has been accelerating in the last few years, and one by one, cutting-edge technologies and equipment are being introduced at construction sites. We will continue to leverage open innovation, proactively incorporate knowledge from around the world, and conduct demonstration tests in advance of introduction.

# Building Skyscrapers Is Part of Our Heritage

We began dismantling the World Trade Center Building (Minato-ku, Tokyo) in August 2021. This is the second skyscraper that Kajima built after the Kasumigaseki Building, at the time when Japan began putting up skyscrapers. We are known in Japan as a leader in skyscrapers because of our involvement in many skyscraper projects, and the current dismantling work is a milestone in the era of replacing these structures. This will be the first time in Japan that a skyscraper



World Trade Center Building under construction in 1969 (Minato-ku, Tokyo)

over 150 meters in height has been demolished. We are marshalling our entire technology portfolio for the project, which is made even more difficult by its close proximity to major transportation arteries such as the Yamanote Line, Shinkansen lines, and the Tokyo Monorail Haneda Airport Line.

Skyscraper renewal can involve demolition and reconstruction, but it can also involve upgrading existing structures to add new functions and utility. As we did at Shinjuku Mitsui Building, Keio Plaza Hotel Tokyo and Yebisu Garden Place, we can install a seismic damping system, a Kajima technology that improves seismic performance while the building is in use. This approach is increasingly common, and we are further improving technologies that make greater use of existing buildings. Skyscrapers have resolved the social issue of office demand in Japan, where land is scarce and expensive, with technology for constructing flexible structures that can withstand earthquakes. When the time comes to renovate or rebuild skyscrapers, we want to deliver new value by fully drawing on our experience in building skyscrapers and by resolving issues through initiatives that fully employ our construction technologies. Kajima will continue to be a frontrunner in this market.

#### **Expand into New Business Areas**

#### **Enhance the Value Chain**

We enhance systems that can provide value to customers in all phases of construction and real estate development. We are evolving as a company that is functionally capable of providing integrated, end-to-end services in the construction industry, from upstream development, design and engineering to downstream interior finishing and building management. BIM and CIM are tools we can use throughout the value chain. We will leverage these technologies to enhance and deploy the comprehensive internal capabilities of the Kajima Group, ranging from development

planning to design, construction planning, estimation, construction, maintenance, management and operation.

In the area of maintenance, management and operation, we will enter the infrastructure operation business as a new area to complement our building management business. We will use these businesses as a venue for demonstrating and establishing new technologies such as environmental technologies. We will also create new businesses by building and using databases.

#### **Overseas Business Platform**

Our construction and real estate development operations are local businesses, so we can only expect business continuity and expansion if we take root in local communities and build relationships with them. The Kajima Group initiated overseas operations as a partner supporting the overseas expansion of Japanese manufacturers, then developed those operations into a full-scale business. Since the 2000s, we have been using M&A to localize, secure outstanding people, acquire promising repeat customers and build a network of partner companies. Currently, we are involved in construction and real estate development and operation in various countries. We have been building a platform through M&A and business alliances that generates synergies between construction and real estate development across multiple business models. It currently encompasses distribution warehouse developer CORE5 and rental apartment developer Flournoy in the United States; a hotel and other property development joint venture with Indochina Capital in Vietnam; and a distribution warehouse development joint venture with Panattoni in Europe. We are also enhancing lateral relationships throughout our global network.

Going forward, we will continue to build this platform in the future while promoting open innovation with companies in different industries, led by The GEAR,\* now under construction in Singapore. We intend to expand further into new businesses as a unique company with construction and real estate development operations worldwide.

#### **Smart Cities and Smart Societies**

We are implementing smart city initiatives in collaboration with companies in different industries, universities and other organizations. Building and operating a smart city involves using leading-edge AI and IoT technology and sophisticated management such as urban operating systems to create new value and resolve issues in areas ranging from energy and healthcare to lifestyles and transportation systems.

Haneda Innovation City is a pioneering smart city. The first phase of construction has been completed, and the second phase has begun. Kajima is leading this urban development project that encompasses autonomous driving and medical welfare. Moreover, we are implementing our smart society concept with initiatives that allow Shikaoi-cho, Hokkaido

<sup>\*</sup> An innovation center for business and research and development that will promote technological innovation and business management in the Asia-Pacific region

#### To Our Stakeholders

Prefecture and Miyakonojo-shi, Miyazaki Prefecture to autonomously produce energy for local consumption. The projects aim to generate electricity from biogas to power local factories and the like. The biogas will be produced using materials that had previously been going to waste: in Shikaoicho, from livestock excreta, and in Miyakonojo-shi, from distillation by-products provided by Kirishima Shuzo Co., Ltd. Shikaoi-cho is also taking on the challenge of structuring a hydrogen supply chain. Through these initiatives, we are acquiring experience and knowledge that we intend to deploy in commercializing projects and expanding their service areas.

We will therefore continue to explore and test our smart city objectives, the implications of the smart society concept, the technological capabilities we can exercise to meet social needs, and the new technologies we should develop.

#### **Business Platform**

#### **Human Resources**

Based on our new Vision, we have begun collaborating with startup ventures and research institutes in Japan and overseas to create an environment in which diverse people can work together to achieve new value. Going forward, we intend to create additional opportunities to interact with people from external organizations. Committed to diversity, we have been hiring women and improving our work environment to promote their active involvement and advancement. We therefore expect many female employees to join the ranks of management in the future. In addition, most of the presidents and executives of overseas subsidiaries are not from Japan, and many executives are women.

We can only secure outstanding people if we are an attractive company that offers good work-life balance and accommodates diverse work styles. Results, correct measurement of those results, visualization of workflows and digitalization are far more important than the amount of time spent on the job. We certainly will not fall back on the excuse that construction is purely engineering acquired through experience on construction sites. Instead, we will create workplaces that empower diverse work styles. Aside from hardware aspects such as robotization, the degree to which we can digitalize work is key.

Our approach to employee education will involve not just on-the-job training from experienced employees, but will also encompass teaching how to use digital information technologies and passing on this technical knowledge. We will also shorten work hours by improving operational efficiency and truly transforming our approach to work.

#### Reform Our Multilayer Subcontracting Structure

The multilayer subcontracting structure has problems such as ambiguous organizational responsibility, a lack of transparency in the payment of wages and reduced quality and safety management capabilities. A construction organization limited in scope to secondary subcontractors will ameliorate these problems, improve the treatment and compensation of skilled construction workers, and help attract younger workers. To make construction a sustainable industry, we will promote reform of the multilayer subcontracting structure. However, it will not be easy, as this structure has been the norm in our industry for many years.

#### Address Climate Change and Take On the Challenge of Carbon Neutrality

Climate change has tended to intensify natural disasters in recent years. The mission of the construction industry is to support a safe society where people can live with peace of mind by providing technologies and services that help to prevent and mitigate disasters, and to mobilize all resources for recovery when a disaster occurs. In addition to conducting design that takes sudden rainstorms and large typhoons into account, we will focus on using software to provide new value—for example, more sophisticated hazard maps and services that support business continuity plan formulation, such as damage and impact forecasts and recovery scenario formulation. Moreover, we have begun providing the q-NAVIGATOR® system as a standard feature. This system determines the degree of building safety in real time in the event of a disaster.

At the same time, the worldwide move toward carbon neutrality is accelerating. The Kajima Group has declared that by fiscal 2030 it will reduce CO<sub>2</sub> emissions by 50% compared with fiscal 2013. We also aim to achieve carbon neutrality by fiscal 2050. We are reducing CO<sub>2</sub> emissions from our businesses by deploying our proprietary Environmental Data Evaluation System (edes) to use data collected from all construction sites in Japan in initiatives to reduce CO<sub>2</sub> emissions. Previously we were only taking sample data from some sites. Without actual data from all sites, we were not able to formulate effective emission-reduction measures. Going forward, we intend to achieve our emission reduction targets by using data from all construction sites to implement effective measures tailored to the differing conditions of each construction site.

We plan to use carbon offsets to cover any shortfalls in CO<sub>2</sub> emission reductions. Options include carbon credits from internal renewable power sources and forests that Kajima owns. In addition, we will further enhance CO<sub>2</sub>-SUICOM<sup>®</sup>, which is concrete that absorbs CO<sub>2</sub> during the manufacturing process, and accelerate its application in actual projects.

We will also proactively help customers reduce emissions. In addition to providing buildings that incorporate energysaving designs, we will cut emissions during construction and employ decarbonized and low-carbon materials.

# **Create New Business Areas by Resolving** Social Issues

The Kajima Group will endeavor to contribute to society while conducting business. We will harness our corporate philosophy



Safety patrol (Photo: Shinjiro Yamada)

of striving to continually advance our business operations and contribute to society through initiatives including the creation of new business areas that resolve social issues. We realize that the world expects the Group to show its willingness to address the needs of society in line with the United Nations' Sustainable Development Goals (SDGs).

Kajima is a construction company that focuses on areas where social and customer needs are increasing, including erosion and flood control, the development of social capital through road and bridge construction, and the reduction of CO<sub>2</sub> emissions. We also ask ourselves how we can contribute to society through our businesses in the future. In tandem with the formulation of our Vision and new Medium-Term Business Plan, we revised our material issues and once again clarified our direction. The core strategies of the new Medium-Term Business Plan are all linked to material issues.

#### To Our Stakeholders

### Compliance

A former Kajima employee associated with reconstruction work in the Tohoku region received money from partner companies. In connection with this, the former employee was indicted without arrest for violating the Income Tax Act, and the government agency that ordered the construction and other agencies issued a suspension from designated bidder lists. We deeply apologize for the great concern caused to all related parties due to the suspension from designated bidder lists as well as some media reports. Kajima deeply regrets the events and has clarified that in dealing with partner companies, accompanying partner company employees for dining, golf and other entertainment is prohibited. In addition, these events were brought to the attention of all officers and employees as a wake-up call. We will continue striving to systematically ensure fair, appropriate transactions and relationships with partner companies.

Our Board of Directors includes outside directors who supervise Kajima management from an external objective perspective and voice points for improvement. In particular, they insist upon thorough compliance. We consider this to be the highest priority for Kajima's management team, who must take the lead. Given the recent incidents, as president I will take responsibility for enforcing thorough compliance. Compliance is a prerequisite for our continued existence as a company, and we intend to ensure that it is embedded in the corporate culture of the Kajima Group.

# "Anything one person can imagine, other people can make real."

I want Kajima to break with the stereotype held by many in the construction industry and within Kajima that the construction industry is special and cannot be like other industries. Getting rid of the belief that "it cannot be done because this is the construction industry" will involve changing our mindset in ways such as full use of digitalization, robotization, automation and other IT, eliminating multilayer subcontracting, ensuring safety at construction sites and shortening work hours. Moreover, we must start thinking of how we can change "because we are Kajima." The late Director and Senior Advisor Shoichi Kajima often quoted Jules Verne in saying, "Anything one person can imagine, other people can make real." This truly represents the attitude we need in taking on challenges as a technology-driven company, and an attitude that we need to deeply inculcate Group-wide.

#### **Closing Thoughts**

Based on our recently implemented Vision and Medium-Term Business Plan, Kajima's management team will draw upon a wide range of internal and external opinions in discussing, finalizing and executing growth scenarios for the Group. We will do our utmost to earn the trust of our stakeholders and continue to grow as a company. Thank you in advance for your ongoing understanding and support.