



Tohoku Jukan Sen

A Civil Engineering and Building Construction Leader

In Japan, Kajima's civil engineering and building construction divisions leverage the practice among Japan's general contractors of handling both the design and construction of the buildings and structures they put up. Our employees look after the overall management of construction projects, working closely with partners who carry out the actual construction work.



We continue to leverage our capabilities to enhance our civil engineering performance. We have consistently focused on providing solutions to such issues as: economy and safety; addressing society's needs, including disaster recovery; creating landscape designs that blend in with the natural environment; and maintaining and improving the value of our buildings and structures.

Kajima constructs a very diverse range of structures in Japan. We have long built Western-style buildings in Japan, starting with the Ei-Ichiban Kan, one of the nation's first. We went on to construct the Supreme Court Building, the Komazawa Gymnasium, which was a venue for the Summer Olympics in 1964, and other landmarks. We drew on our successes and expertise to build Japan's first skyscraper, the Kasumigaseki Building, in 1968. As well as both designing and constructing buildings and structures, we make the most of collaboration between our architectural, construction, and design divisions, as well as our technological development strengths and practical expertise in constructing buildings that other firms have designed.

This approach empowers us to address the diverse concerns of clients and designers in projects as varied as offices, residences, manufacturing facilities, museums, convention halls, sports facilities, hotels, hospitals, schools, and commercial facilities.

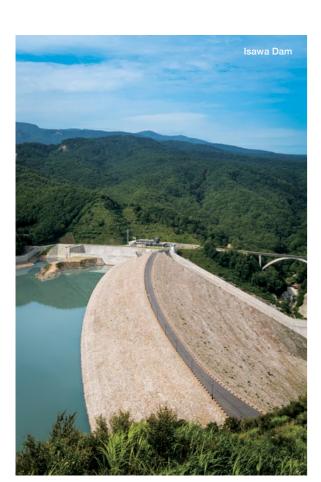
In the area of civil engineering, we are currently working on projects to increase the accessibility and serviceability of roads and highways throughout Japan and to upgrade the nation's railway network. We are involved in projects for both the Hokuriku Shinkansen line, which will open in 2015, and the Hokkaido Shinkansen line, which is under construction. In addition, we have been working for six years on the new Tohoku Jukan Sen, a major new train line that will connect several other lines, which now terminate at Ueno Station, to Tokyo Station. This highly sophisticated project has involved a great deal of difficult work immediately above the tracks of existing lines. All of these complex train projects require work to be done during the hours after the last train and before the first train the next morning.

In the fiscal year under review, we have also received several key civil engineering orders in Japan. One, from Tohoku Electric Power Co., Inc., involves raising the seawall around the Onagawa Nuclear Power Plant in Miyagi Prefecture. Another, from the Ministry of the Environment, concerned decontamination work in Tomioka, Fukushima Prefecture. Major initiatives completed during the year included levee embankment work on the Isawa Dam and a Tokyo Port tunnel project for National Highway 357.



Reconstruction in Tohoku is a major concern in Japan. We were involved in what is considered the first step of this recovery, disaster waste disposal and construction of treatment facilities in Iwate and Miyagi Prefectures, which were completed in March 2014. We also began a large-scale urban planning project encompassing multiple locations in fiscal 2013. This project is overseen in construction management style, which, unlike the general contractor style, takes an integrated approach to managing all aspects of the project from surveys, measurements, and design to the actual construction work. The project aims to reinforce the local infrastructure to make it safer and more secure post-quake by moving railroad tracks and roads from the coastline toward the mountains and building seawalls along the coast. Kajima brings the expertise we have built over many years to both the construction and design aspects of this work.

Kajima's building construction business strives to construct safe and secure spaces that allow people to enjoy comfortable lifestyles and diverse activities. Examples include renovating buildings to make them more energy efficient or more prepared to withstand long-period ground motion caused by massive earthquakes. We oversee projects from the design stage, allowing



us to consider the building lifecycle and environmental performance from the outset as well as to provide a variety of flexible floor plans.

We conduct R&D into cutting-edge construction techniques and combine expertise in many different fields to meet user needs. Our strong track record has enabled us to build solid trust with a broad network of customers, which continues to lead to new projects. We leverage close cooperation between our engineers and subcontractors to ensure quality at construction sites. We also provide engineers with training programs covering diverse topics while keeping abreast of overall trends in the construction industry.

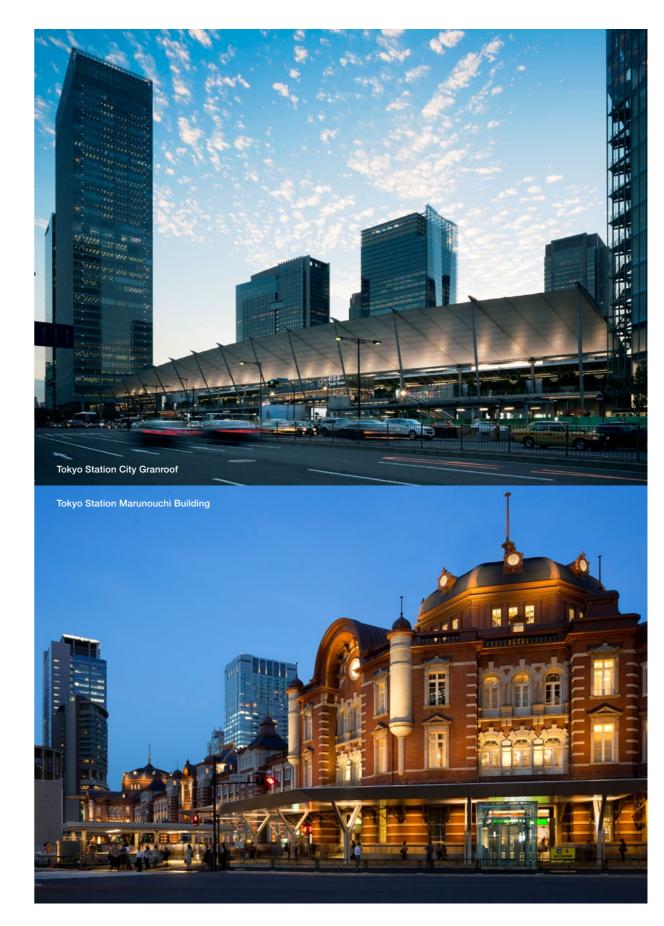
New Projects, Ongoing Expertise

Kajima is involved in a great many other large-scale building construction projects in the greater Tokyo metropolitan area. While completing the restoration of the Tokyo Station Marunouchi Building in 2012, we also worked on Tokyo Station City Granroof, which is located on the Yaesu side of Tokyo Station and was completed in September 2013. New orders in the fiscal year under review included a new building construction project for an urban redevelopment initiative in Ginza, Tokyo, as well as an order for a new plant of a major heavy industry manufacturer in Nagoya, Aichi Prefecture. Among projects completed were the Haneda Chronogate logistics terminal in Tokyo for Yamato Transport Co., Ltd., the Hotel Monterey Okinawa Spa & Resort, and a plant in Kitajima for Taiho Pharmaceutical Co., Ltd.

Since the Great East Japan earthquake, construction demand for base isolation structures has risen, and Kajima is involved in more projects to retrofit government and public buildings that function as shelters in times of disaster. There is also increasing demand to upgrade existing skyscrapers to withstand long-period ground motion, and Kajima uses its technological expertise to create tailored renovation plans for each structure. We continue to receive general reconstruction orders from quake-hit areas of Japan, as well, a good example being one for the construction of a fish market from the Ishinomaki Municipal Government.

Delivering Value through Real Estate Development

Development complements construction and civil engineering as another core business focus at Kajima. We offer several unique advantages as a real estate developer. One is that we are able to deliver on all aspects of high-quality and high-value development by drawing on the rich expertise across the Kajima Group in planning, construction, tenant leasing, management, and operations.



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Our domestic development business began to make its mark in Japan in the 1970s, when the nation's economic growth accelerated. We began developing large residential properties and condominium projects and expanded into office building and commercial facility development projects.

One of our landmark achievements was Shiki New Town, one of the largest independent private-sector projects ever in Japan. The project started in 1971, with the private sector undertaking all aspects of development and construction. These activities extended from acquiring and reclaiming land through town planning, design, construction, and selling condominiums. With 3,021 residences, the town was completed in 1988. In 1992, we finished constructing Tokyo East 21 on property that we owned.

Financial innovations have reshaped the real estate development market in recent years. We took advantage of new financing possibilities to create special-purpose

companies and leverage real-estate securitization to enhance returns on investment. One of our successes was the 2006 Akihabara UDX project, Japan's first large development project to use real estate securitization. We also participate in private finance initiative (PFI) projects, or public-private partnerships as they are also known, to construct and operate public facilities and social infrastructure in keeping with our commitment to buildingvalue and enhancing the urban landscape for future generations.

Many of Kajima's real estate development projects are PFI projects, since this is a field that requires technical expertise in both design and construction. In 2013, we completed a number of these projects, which are now leased to public entities, and accepted a number of new projects, as well. Kajima has also received orders from the private sector that involve large-scale renovation of massive multifunction complexes in the Tokyo suburbs and anticipates even more business in this market in the future.

Toward 2020

Kajima is developing and verifying numerous technologies at its facilities as part of its effort to deliver zero-energy buildings by 2020. We look to incorporate these buildings in smart communities that expand the use of district energy networks and urban management.

In 2012, we built the new Akasaka K Tower, which has achieved our zero-energy targets. We also continue to explore ways to remodel office buildings to become zeroenergy facilities, applying what we learned in 2011 on-site verifications of a renovated section of the Kajima KI Building, which houses the Civil Engineering Design and Architectural Design divisions. Those tests showed that the renovations had cut energy consumption in half.

For this project, we conducted R&D with other leading companies in air conditioning, lighting, and other fields. This resulted in such advances as real-time energy consumption visualization, tablet applications that optimize office environments, and a smart power control system that recharges lithium-ion batteries using solar panels to stabilize electricity supplies. Kajima received the Good Design Award 2012 for its approach to renovation to create zero-energy buildings.

After completing the main research building of the Kajima Technical Research Institute in 2011, we slashed the facility's annual carbon dioxide emissions by 62% in fiscal 2012. The Society of Heating, Air-Conditioning and Sanitary Engineers of Japan recognized this advance by awarding a prize to Kajima at its 51st awards ceremony.

As Tokyo prepares to host the 2020 Summer Olympics, the city is looking to build sports venues and other facilities, albeit on a much smaller scale than when it hosted this event in 1964.

These new facilities will be more compact and more environmentally friendly. The city is also taking advantage of this opportunity to maintain and develop its infrastructure, much of which was constructed at a frenetic pace before the 1964 games. The passage of time has meant that roads, bridges, and many other infrastructure components built in the early 1960s are due for extensive repairs or replacement. The Tokyo Metropolitan Government is currently reviewing which projects to prioritize.

Kajima has been a major player in Japan's development for more than a century, and we stand ready today to contribute to social sustainability for generations to come. We are determined to make the most of our advanced technologies to enhance the safety and security of Japan's infrastructure and minimize its impact on the global environment.



