Civil Engineering



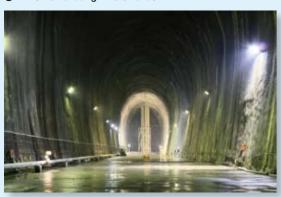
Revenues ¥269.5 billion **Operating Income**

The Civil Engineering segment encompasses civil engineering design and construction operations in Kajima's construction business. Civil engineering projects performed by Kajima in Japan and worldwide are included in results on a nonconsolidated basis. In the fiscal year ended March 31, 2013, segment revenues remained largely on par with the previous fiscal year, declining slightly by ¥14.5 billion, or 5.1%, to ¥269.5 billion. The segment recorded an operating loss of ¥8.1 billion, mainly as a result of deteriorating profits from certain construction projects outside Japan.





◆ Tanjung Priok Access Road (Sec. E2)

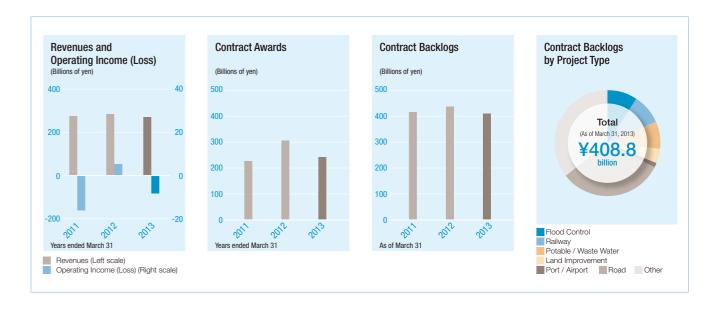




mast conducted in the Pacific Ocean off Choshi City (NEDO* & Tokyo Electric

*NEDO: New Energy and Industrial Technology Development Organization





Kajima's Civil Engineering business is focusing on reconstructing areas damaged by the Great East Japan Earthquake. Examples of such work include projects to remove and process debris from the disaster, and measures to protect against large-scale earthquakes that are anticipated in years ahead, as well as the upgrading of buildings constructed during Japan's postwar period of economic growth, to enable their use for generations to come. The business also promotes construction of infrastructure and facilities in Asia and other regions around the world, drawing on our technological capabilities acquired over many years in Japan.

The overall evaluation bidding method has grown more common in the construction industry, especially in Japan in recent years, and projects open for bidding increasingly require expertise in both design and construction. In response, Kajima will pursue projects where it can maximize its technical advantages. Toward this end, we will concentrate our R&D on new technologies and bolster ongoing training programs for personnel.

Disposing Waste in Disaster Areas Brings the Region Closer to a Genuine Recovery

The Great East Japan Earthquake caused extensive damage in lwate, Miyagi and Fukushima prefectures. The total amount of debris resulting from the earthquake and sediment caused by tsunamis in these three prefectures is estimated at over 26 million tons (as of March 31, 2013).

Kajima was contracted to undertake debris removal and processing work in three areas damaged by the disaster: the Ishinomaki area in Miyagi Prefecture, comprising the cities of Ishinomaki and Higashi-Matsushima and the town of Onagawa; the Eastern Miyagi area in the same prefecture, comprising the cities of Shiogama and Tagajo and the town of Shichigahama; and the Miyako area of Iwate Prefecture, comprising the village of Tanohata, the town of Iwaizumi, and the city of Miyako.

About half of Miyagi Prefecture's total amount of waste from the disaster is being processed at a single processing plant located in the Ishinomaki area, which is the largest such processing site. Work began in October 2011, and by September 2012 Japan's largest intermediate disposal facilities for processing the waste were in operation, including five incinerators on site. The facilities can incinerate up to 1,590 tons of waste per day, the highest capacity in Japan. Debris and sediment at temporary stockyards scattered

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debris by hand is undertaken in sorting yards. This work is done by more than 700 people, of whom more than 400 are employed from the local area. Many of these workers lost their previous jobs as a result of the disaster.

The completion of this work to dispose of the debris will signal the start of the path toward a full-scale recovery in the disaster-affected areas. Kajima is harnessing the capabilities of the entire Company to finish this work on schedule, so that people in the affected regions can take the next step toward rebuilding their homes.



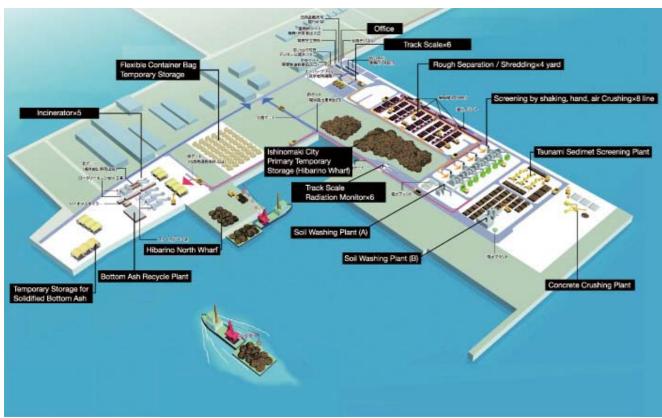
Screening by hands

throughout the affected areas are transported to the processing site, and intermediate processing is handled on site; after processing or incineration, byproducts are transported outside the processing site. Maximizing our management capabilities and onsite operational capabilities, we are working around the clock, to complete the processing by March 31, 2014.

Kajima is employing several technologies for the first time in debris transport operations, including the Smart G-Safe® vehicle management system. The Company is using this system to help relieve traffic congestion and ensure the safety of local residents when transporting debris from temporary

stockyards. Kajima is also employing Japan's first radiation gate monitoring system, which is capable of automatic high-speed measurement of radiation dose rates of all vehicles and containers that transport debris from the site.

Covering an area of 68 hectares, the site contains an office zone as well as separate yards for preliminary sorting, shredder sorting and processing, soil remediation, crushing of concrete and gravel, and incineration. The country's largest sorting facilities, incinerators, and heavy machinery, numbering in the hundreds, are in operation throughout the site. Together with these operations, the indispensable work of screening



Disaster Waste Disposal Project (Ishinomaki Area), Overview of Intermediate Disposal Facilities

Enabling Public Assets to Be Used Continually, Far into the Future

From early on, Kajima has understood the importance of maintaining, managing and upgrading buildings constructed during Japan's period of rapid economic growth. Accordingly, in 2002 the Company began studying asset management systems and developing techniques for building maintenance and management.

In 2005, Kajima was contracted to set up a bridge asset management system for the Aomori prefectural government, which sought to prepare for the large-scale maintenance of its bridges in the future. Kajima completed the system the following year, and the government used it to conduct simulations. In preliminary calculations, the system revealed that by shifting from a corrective maintenance approach used in the past to a strategic maintenance and management approach, the prefecture could cut maintenance and management costs by as much as ¥120 billion over a 50-year period.

Kajima's bridge asset management system was fully adopted and utilized to calculate maintenance schedules. According to these plans, proper maintenance at the most appropriate times was carried out on bridges inside the prefecture, improving their structural soundness. Aomori Prefecture conducted two rounds of routine inspections, and after calculating maintenance and management expenses again in the fiscal 2012, announced new plans

for extending the service life of its bridges through repair work. Expenses were considerably lower than the original plan, demonstrating the effectiveness of Kajima's asset management system.

The system has been promoted since then as BMStar® by a bridge management system consortium made up of bridge engineers, program development firms, and operational support consultants, and about 20 municipalities in the country have adopted it to date. Bridge maintenance and management is an ongoing process rather than a temporary measure. In this light, integrating BMStar® in systems used by bridge administrators is leading to the most effective maintenance and management of bridges.

Maximizing its extensive construction techniques and advanced technologies such as structural deterioration diagnostic systems, Kajima intends to enhance BMStar®

as a system
developer in the
future, with a view
to contributing
continuously to
the safety and
security of the
country's bridges.



BM Star used during periodic inspections of this bridge

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Nurturing Human Resources in the Civil Engineering Division

Kajima revamped its training programs for engineers in the Civil Engineering Division in 2008, in an effort to continue creating a corporate culture that encourages learning and self-improvement, with the goal of nurturing highly skilled engineers at construction sites. The division designates the first five years after employees join the Company as an essential period for acquiring fundamental skills, and the following five years as a time to gain basic expertise in specialized areas of construction, such as tunnels and bridges. Training is conducted in seminar and workshop formats, and from the sixth year instructors are recruited and employees are invited to attend training programs structured to encourage mutual learning between teachers and students.

In addition, the division provides training programs designed to enable its civil engineers to succeed worldwide. Employees are assigned to study or work at companies outside Japan as a way to systematically improve their abilities in risk management, contracts and management of overseas projects. The division also actively recruits non-Japanese college graduates for career-track positions.



Practical training in measurement



Employees gain hands-on experience working with concrete

External Evaluations and Awards

Kajima puts the utmost priority on quality, safety and the environment when undertaking construction work and conducting a broad spectrum of research and technical development. These efforts have been recognized with awards in numerous fields

Awards from the Japan Society of Civil Engineers

Six years after its founding, the Japan Society of Civil Engineers established the Civil Engineering Award in 1920. It has since become a prestigious award in Japan with a tradition spanning more than 90 years.

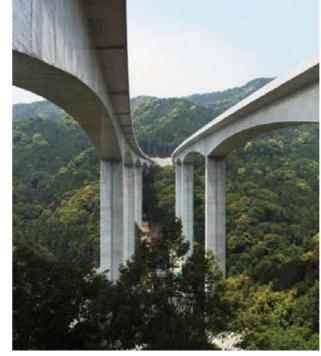
In the fiscal 2012, the society presented Kajima with several awards, including Outstanding Civil Engineering Achievement (OCEA) Awards in the Group I category for the construction of the Tobetsu Dam in Hokkaido and the Tsugaru Yomogita Tunnel for the Hokkaido Shinkansen (bullet train) line. For the Tobetsu Dam, Kajima employed the Cemented Sand and Gravel (CSG) Method, marking the world's first construction of a dam with this method. To build the Tsugaru Yomogita Tunnel, Kajima used the high-speed excavation SENS method, which incorporates the Shield Tunneling, Extruded Concrete Lining, and New Austrian Tunneling methods into one system. The Company also received an OCEA Award in the Group II category for the Yunishigawa Dam. In this project, Kajima initiated a new method to improve social capital through streamlined construction that considers the area and environment.



Tsugaru Yomogita Tunnel for the Hokkaido Shinkansen



Yunishigawa Dam



The New Tomei Expressway Sanagawa Bridge

In addition, Kajima received the society's Tanaka Award in the Excellence in Bridge Design and Construction category for the Sanagawa Bridge. An Innovative Technique Award was also presented to Satoru Miura and four other employees from the Kajima Technical Research Institute for their development of an automated driving system for construction machinery operating under high-radiation conditions.

Engineering Merit Awards from the Engineering Advancement Association of Japan

The Engineering Advancement Association of Japan established the Engineering Merit Award in the fiscal year

ended March 31, 1982 to recognize groups and individuals for their noteworthy achievements and contributions to promoting and developing the field of engineering.

In the fiscal year ended March 31, 2013, Kajima's construction team that built Runway D at Tokyo International Airport (Haneda) was recognized for promoting engineering in the Group category, and the Company's project team handling construction of the CR4 section of the Kaohsiung Subway in Taiwan was recognized for its international collaboration in the same category. In the Individual category, Hisatoshi Matsukawa from Kajima's Shikoku Branch was presented with the award for his contributions to engineering.

A Number of Awards Received for the Application of CO₂-SUICOM® Concrete

Kajima is working actively to reduce CO₂ emissions with respect to building materials. Toward this end, the Company collaborated with Chugoku Electric Power Company, Inc. and Denki Kagaku Kogyo K.K. to jointly develop CO₂-SUICOM, an environmentally friendly concrete that generates zero emissions or less, made possible because it can solidify while absorbing CO₂ in exhaust fumes from thermal power plants or other facilities. The amount that CO₂-SUICOM can absorb is greater than the CO₂ emitted at the time of manufacturing cement, a raw material of concrete. Consequently, the concentration of CO₂ in the atmosphere can be reduced by manufacturing concrete products using CO₂-SUICOM cement. CO₂-SUICOM also facilitates resource recycling because coal ash, a byproduct generated at thermal power plants, can be used as an ingredient in the cement.

CO2-SUICOM is being used in civil engineering as an outdoor building material for concrete blocks, fence bases, and other items, and has earned a strong reputation for its application in large-scale residential redevelopment projects. These achievements are reflected in the numerous awards CO2-SUICOM has received, including the Environmental Award from the Japan Society of Civil Engineers, the Takahashi Award from the Japan Electric Power Civil Engineering Association, and the Chairman's Award from 3R Suishin Kyogikai, an organization promoting the reduce-reuse-recycle principle in Japan.

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