Sales in the Civil Engineering segment remained nearly at the same level as the previous fiscal year at ¥468.6 billion. Operating income decreased 25.8% to ¥53.0 billion due to a drop in gross profit margin.

Overview of Segment

Sales

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales (Billions of Yen)</th>
<th>Operating margin (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>¥449.4</td>
<td>12.3</td>
</tr>
<tr>
<td>2017</td>
<td>¥466.4</td>
<td>15.3</td>
</tr>
<tr>
<td>2018</td>
<td>¥468.6</td>
<td>11.3</td>
</tr>
</tbody>
</table>

Net Sales Composition

- Sales: ¥468.6 billion (Up 0.5% YoY)
- Operating income: ¥53.0 billion (Down 25.8% YoY)
- Operating margin: 11.3%

Industry-leading technical capabilities

Robust worksite capabilities accumulated in difficult projects

- It is essential to create a business foundation to resolve social issues such as the frequent occurrence of unimaginably serious disasters, changes in energy policy, obsolescence of infrastructure and labor shortage. Therefore, we will accelerate activities including work style reform, productivity improvement, reinforcement of technical and construction capabilities, reconstruction of the overseas civil engineering business and challenges in new domains.

As measures for productivity improvement, we will promote the utilization of T-CIM*1 and ICT (information and communications technology) tools and outsourcing, and focus on the development of labor-saving and unattended construction technology.

For the reconstruction of the overseas civil engineering business, we will thoroughly manage the projects under construction to avoid mistakes and losses. In addition, by actively establishing an alliance with foreign companies, we will secure construction capabilities to compensate for our insufficient capabilities and expand the business scale.

We will actively tackle areas including Public Private Partnership (PPP) projects for the renovation of airports, harbors, water and sewage facilities, etc. and concession*2 business. As for the energy and the environment domains, we will push forward with activities in new areas such as renewable energy and CCS*3.

Based on these strategies, we will try to provide our unique corporate value to our customers.

Advantages

Medium- to long-term strategies

Executive Vice President, Members of the Board; Chief of Civil Engineering Division; In charge of Safety Administration
Shigeyoshi Tanaka

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*1 It is our proprietary CIM (Construction Information Modeling) System that manages and shares construction-related information. The company is currently promoting the introduction to engineering construction sites.

*2 It means that a public entity such as the government sells the management right of an airport, water business, etc. to private companies while keeping the ownership.

*3 An abbreviation of Carbon dioxide Capture and Storage. It is technology to capture and store carbon dioxide.
Venue of Value Creation

Project in which Various Civil Engineering Technologies Are Gathered and Adopted

● Tokyo Outer Ring Road — Oizumi South Section of the Main Tunnel (North Bound)

Overview of construction project
Client/designer: Central Nippon Expressway Company Limited, Tokyo Branch
Location: Nerima-ku, Tokyo to Musashino-shi, Tokyo

It is tunnel construction to be excavated by shield machine about 7km of the north-bound tunnel from Oizumi, Nerima-ku to Kichijoji, Musashino-shi. To overcome the issues of complicated ground with alternated strata4, small soil cover5, deep-depth and high-water pressure, we gathered and employed various civil engineer technologies.

Japanese largest shield machine with a diameter of 16.1m is equipped with a tilted-type cutter head and specially reinforced bit. The tunnel was created by installing concrete pillars along the planned route in the ground, and cutting them directly with the cutter which rotates at high speed and progresses at slow speed.

The tunnel is expected to ease congestion in the urban area, improve the environment and create a smooth traffic network.

*4 Strata that consist of alternated layers of different kinds of rocks and soils
*5 Thickness of earth, sand and bedrocks from a digging point to the surface of the ground

Disaster Recovery Construction Project for a Large-Scale Bridge which Adopted Advanced Civil Engineering Technologies

● Disaster Recovery Project of National Route 325 in Kumamoto, Aso Ohashi Bridge Upper and Lower Structure Construction

Overview of construction project
Client/designer: Ministry of Land, Infrastructure, Transport and Tourism, Kyushu Regional Development Bureau
Location: Minami-Asomura area in Kumamoto

Disaster Recovery Project of National Route 325 in Kumamoto, Aso Ohashi Bridge Upper and Lower Structure Construction

It is a construction project of the upper and lower structure of Aso Ohashi bridge, which was closed because it fell down in the Kumamoto earthquakes in April 2016. With the project, a new bridge is constructed about 600m downstream from the point where the original bridge was existed. It is a 345m-long prestressed concrete rigid frame bridge with three-span continuous girders6. Both upper and lower structures are the largest of their kind in Japan.

To meet the requirements that are unique to the Aso area including steep terrain, the preservation of columnar joints7 of Tateno Gorge, and cold winter climate, we adopted various advanced civil engineering technologies including a large-scale incline device8 to conduct efficient and safe construction work. While people are expecting the bridge’s completion to be a symbol of the recovery, we are aiming to open the bridge in FY2020.

*6 A bridge whose main girders and bridge piers are combined.
*7 Column-shaped cracks in stones
*8 A device to move a wagon to transport a vessel and cargo by installing rails on slopes
Sales in the Building Construction segment increased 6.6% year on year, to ¥1,130.4 billion reflecting higher sales in the Company and its consolidated subsidiaries. Operating income fell 9.0% to ¥87.6 billion due to a drop in gross profit margin.

Advantages

Robust worksite capabilities that lead to customer satisfaction

Collective strength that is created by our members who are engaged in sales, design and construction

Understanding customers’ expectations and needs, we provide environment-friendly buildings that realize a low-carbon society and structures that are resilient to natural disasters including earthquakes and typhoons. We are reinforcing our ability related to proposals, designs, organizations, sales and technologies for the entire value chain of the Taisei Group including sales, design, procurement, construction and renewal work.

Through the flexible allocation of our employees, which is adjusted depending on order volume, we are trying to secure a stable construction system. In addition, we are accelerating the measures that we have been working on including the promotion of work style reform such as the improvement of productivity of design and construction with ICT and the introduction of new technologies. During FY2018, we established the Digital Product Center to improve the productivity of construction processes from design to construction and reduce the workload of worksite offices.

Projecting the medium- and long-term business environment after 2020, we are working on the addition of high value and the enhancement of revenue opportunities to realize sustainable growth with labor-saving technologies that utilize the IoT, AI, etc. by strengthening competitiveness to receive orders for the energy management business in ZEB/smart community areas.

By satisfying customers’ needs and expectations with our collective strengths, we keep creating value for the future.
Venue of Value Creation

Stadium in Forest That Will Last a Hundred Years
● New National Stadium Development Project*

Looking ahead to the next 100 years, the New National Stadium will open to the public in harmony with the surrounding Jingu no Mori neighborhood. Drawing on our accumulated technologies and know-how, we are currently constructing a solid stadium that will last for many years through use of highly durable, long-lasting, easy-to-maintain materials and natural energy sources, and by limiting the scope of the stadium’s use according to the scale of the events held. Construction is expected to be completed by the end of November 2019.

The Stadium is designed with overhanging eaves, which are one of the features of traditional Japanese buildings adapted to the Japanese climate. The eaves, made of forest-certified lumber sourced from all of Japan’s 47 prefectures, are aligned with the orientation of each prefecture. Our sustainability initiatives are also attracting attention.

The National Stadium as a “holy place” for sports in Japan had witnessed many memorable competitions. Inheriting this history, the New National Stadium is being reborn as a Japanese-style stadium, transmitting the excitement that athletes and spectators create together to the world.

*After completion, the stadium will be named “National Stadium.”

Creation of a Place of Hospitality Which Japan Can Be Proud of in the World
● Hotel Okura Tokyo Main Building Reconstruction Project/(Tentative Name) Toranomon 2-10 Project

Hotel Okura Tokyo was established in 1962 by Kichihiro Okura, the eldest son of Kihachiro Okura, the founder of Taisei Corporation, and the second leader of Okura Zaibatsu. Inheriting the legacy that has been loved by VIPs and important guests from all over the world since its establishment, a complex of two buildings to house one of the best quality hotels in the world and offices, which represent an international city, Tokyo, will open in September 2019.
Overview of Segment

Sales in the Real Estate Development segment rose 1.7% year on year, to ¥121.8 billion. Operating income remained nearly at the same level as the previous fiscal year at ¥12.9 billion.

Advantages

- Proposal capability that helps to improve the value of the local community
- Ability to present solutions based on abundant experience and know-how

While measures to tackle the obsolescence of public buildings and reinforce the international competitiveness of urban areas have become urgent tasks, in the area of urban development, Taisei Corporation is expected to resolve social issues in cooperation with local communities.

We are engaged in the city redevelopment business mainly for the Tokyo area and local core cities. For large-scale private development projects such as Hotel Okura Tokyo Main Building Reconstruction Project (p.42) and New Construction of Toranomon 2–Chome District Project (p.10), we have been promoting them as a project operator.

As for a PPP/PFI (Private Finance Initiative) project, one of the methodologies to develop a public facility, we will strive to secure stable revenue from the facility operation business focusing on the airport concession* business such as the operation of Takamatsu Airport.

By utilizing the know-how accumulated through our engagement in many redevelopment projects, we are implementing a project to rebuild obsolescent apartments with Taisei-Yuraku Real Estate Co., Ltd., a project to reconstruct public housing and measures to reduce the area covered with wooden buildings with TAISEI U-LEC CO., LTD. and TAISEI HOUSING CORPORATION. In this way, by keeping close communication among group companies, we are improving the profitability of the entire group.

In FY2018, we established the Development Business Department (International) for expansion of the international development business focusing on Southeast Asian countries where investment demand for new development is booming.

We will keep promoting urban planning strategically, and providing urban planning solutions and new value based on the local culture by utilizing abundant know-how and networks.

*It is to enhance/reinforce an aviation network and local revitalization by integrating the management of basic facilities such as runways and airport terminal buildings for efficient operation.

Senior Managing Executive Officer;
Chief of Urban Development Division
Katsuyuki Kanai

Real Estate Development

By resolving various social issues, we continue to provide new value based on local culture.
Venue of Value Creation

New Cultural Exchange Base Was Created in the Center of Sapporo
● Sapporo Sosei Square

Sapporo Sosei Square was created in a redevelopment project through a partnership between public and private sectors in an area with major sightseeing spots in Sapporo such as Clock Tower near Odori Station, where three subway lines stop (Namboku Line, Tozai Line, Toho Line). In addition to offices and a broadcasting station, the public complex has a theater with 2,300 seats for performing arts such as opera and Sapporo Community Plaza, which includes a library. We participated in the Redevelopment Conference in 2009. After being selected as a specific business agent in 2014, we helped bring the project to completion from project promotion to the construction phase.

Creating a Vibrant Spot in Kyoto and Helping to Improve Attractiveness and Revitalize
● Kyoto Keizai Center

Kyoto Keizai Center, a large-scale complex, was built in the center of Kyoto’s Shijokarasuma/Shijomuromachi area. It is a project to create a new economic base launched by an economic organization as a part of the 100-Year Plan for the Kyoto Economy. We promoted the project by cooperating with each owner of the segment, and handled the design and construction of a commercial facility (SUINA Muromachi) as well as its commercialization.

It creates a vibrant spot where many people gather and interact, and helps to improve the attractiveness of and revitalize the entire Shijokarasuma/Shijomuromachi area.