



Sumitomo Mitsui Construction

# Corporate Report

# 2017

## Contact

Corporate Planning Department, Sumitomo Mitsui Construction Co., Ltd.  
2-1-6 Tsukuda, Chuo-ku, Tokyo, 104-0051, Japan  
TEL: 81-3-4582-3016 FAX: 81-3-4582-3205  
E-MAIL: [information@smcon.co.jp](mailto:information@smcon.co.jp)  
URL: <http://www.smcon.co.jp>  
Corporate Report online version: <http://www.smcon.co.jp/en/investor/index.html>



# Bridges, Towns and People

Sumitomo Mitsui Construction is  
a comprehensive construction company  
committed to building infrastructure that  
improves safety and convenience  
for people everywhere.

For every customer, every resident,  
and every family whose lives we touch,  
we seek to fulfill each of their hopes as well as our own  
while at the same time preserving our environment  
and prosperity for future generations.

We do this through our commitment  
to building infrastructure that people use on a daily basis,  
whether crossing a bridge, strolling about town  
or spending time with loved ones.

Bridges, towns and people are what we care about.  
As we strive to develop and maintain harmonious  
relationships with our partners and other stakeholders,  
we are creating timeless and universal value  
by building infrastructure that embodies  
both their hopes and happiness.

### Note on Outlook

This report contains Sumitomo Mitsui Construction's plans and strategies for the future, as well as forecasts and outlooks for future performance, as of the end of May 2017. Actual performance may differ from the outlook.

## Corporate Principles

### Pursuit of Client Satisfaction

We continue to innovate our technologies and cultivate creativity to provide high quality construction works and services in response to the needs and trust of clients and the society.

### Enhancement of Shareholder Value

We make sustainable business development by thoroughly efficient management and maintaining profitability to boost the shareholder value along with the corporate value.

### Respect for Employees' Vitality

We create an open-minded and rewarding company where the employees can fully exercise their ability and individuality.

### Social Emphasis

We practice fair corporate activities and aim to become a good corporate citizen which the society can trust.

### Contribution to Global Environment

We constantly seek to be an eco and human friendly contractor and also value harmony between living environment and nature.

## Charter of Corporate Conduct

- 1

We take countermeasures to meet the various demands in construction activities through technology development and design proposal giving full consideration to quality and environment.
- 2

We strive for improving the corporate value, and at the same time, by actively disclosing fair corporate information to the stakeholders and the society, we try to achieve the highly transparent corporate management.
- 3

We maintain the employment and develop human resources of employees through long-term perspective, furthermore, we try to set up the corporate which respects human rights and beings.
- 4

We improve awareness to comply with laws, social norms, international rules and corporate ethics in order to perform fair, transparent and free competition and fair trade.
- 5

We recognize the demand of contribution to the society's healthy and continuous development, and we promote social contribution activities in order to achieve corporate harmony with the society.
- 6

We recognize the demand of contribution to the global environment, and we actively work toward to preserve, sustain and improve environment.
- 7

In case, our activity against this charter occurs, the top management shall work by themselves to solve the case, and execute accountability to the society as well as disciplinary action that applies to both the top management and employee.

### Editorial Policy

From fiscal 2006, Sumitomo Mitsui Construction issued CSR Reports in order to give a broad outline of its governance, social and environmental (GSE) initiatives, which were not covered in the company's financial statements. Starting from fiscal 2015, Sumitomo Mitsui Construction has instead been issuing a Corporate Report, with additional financial information, including information on operating performance and management strategy as well as business overviews, as a tool for two-way communication with all stakeholders, bringing together overall initiatives for improving corporate value.

## CONTENTS

Corporate Principles/Charter of Corporate Conduct	02
Editorial Policy	02
Message from the President	03
Introduction	07
Business of Sumitomo Mitsui Construction	07
Key Projects Completed in Fiscal 2016	09
<b>Value Creation Stories</b>	11
Group Vision/Long-term Management Policies/Mid-term Management Plan 2016-2018	12
Overall Picture of Value Creation Stories	13
Reform Production System	15
Secure, Cultivate and Vitalize Human Resources	29
Build a Multilayered Earnings Base	35
Progress of the Mid-term Management Plan 2016-2018	39
Financial & Non-financial Highlights	40
Fiscal 2016 Business Overview by Division	41
Governance, Social and Environmental (GSE) Activity Report	43
Governance Report	45
Corporate Governance System	45
Operation of Internal Control System/Improving Compliance	47
Risk Management	48
Message from External Director and External Auditor	50
Officers	51
Initiatives for Local Communities and the Environment	53
Third Party Opinion	57
Corporate Profile	58

■ Period Covered:	From April 1, 2016 to March 31, 2017 (includes some initiatives conducted before and after the period)
■ Scope Covered:	Sumitomo Mitsui Construction Co., Ltd. And its consolidated subsidiaries
■ Guidelines Referenced:	ISO 26000
■ Publication Date:	September 2017



# We Will Create Value That Addresses Social Issues to Restore Creditability and Achieve Sustainable Growth



## To Restore Creditability and Enhance Our Corporate Value

The SMCC Group is implementing its Mid-term Management Plan 2016-2018, now in its second year. In response to the defective-quality piling work found two years ago, the plan sets the basic theme of restoring creditability and enhancing our corporate value, as well as focus themes of reforming our production system and securing, cultivating and vitalizing human resources. Financial targets for fiscal 2018 are 440 billion yen in sales, operating profit on sales of 5% or higher, a capital-to-asset ratio of 20% or higher, and a dividend payout ratio of 20% or higher. The SMCC Group is making group-wide efforts to achieve these qualitative and quantitative targets included in the Mid-term Management Plan with the goal of restoring creditability and enhancing its corporate value.

### Reforming Our Production System

In order to improve productivity and secure quality for reforming our production system, we built a clear responsibility framework by establishing the Production Management Division as a cross-sectoral organization tasked with working with the civil engineering and building construction sectors, which were formerly structured separately. Over the past year, we have built an organizational system as well as provided guidance and conducted audits at sites. As part of these efforts, we assigned Production Management Division personnel to each branch. At the same time, to improve the skills of employees who serve as auditors, we provide them with opportunities to share information and ensure adherence to the policy twice a month. Additionally, to push forward with the reform, we established the Production System Improvement Committee and three sub-committees to work on the themes of productivity improvement, worker retention and execution system improvement. The Production Management Division also plays a crucial role as secretariat of the committee. In terms of technology, we have aggressively been working on technological development for improving productivity and securing quality using ICT, as well as advanced methods using precast concrete, through cooperation between related departments. We got a positive response for the first year.

### Securing, Cultivating and Vitalizing Human Resources

With regard to human resources, I place emphasis on education. We are enhancing our education system at a rapid pace and building multilayered education programs that are based on job classification and on rank, including new employee training. Outside Japan, we have established facilities for employee training targeting local employees. We will also enhance the revived study abroad program and an English training program to be held outside Japan.

Meanwhile, cooperation with partners is essential to the business of the SMCC Group. While enhancing partnerships with partners through semiannual meetings, we are developing mechanisms to cooperate with them for skills improvement and worker retention. For instance, our partners organize site tours at our sites for local high school students. Such tours provide the partners with opportunities to gain the trust of local stakeholders, and sometimes lead to recruitment.

In terms of worker retention, we are focusing on shortening working hours and on diversity. We have long recognized that shortening working hours in particular is a major management issue due to the structure of the construction industry. We thus developed a program for shortening working hours four years ago and have since implemented it. However, there are some difficulties. For example, for workers in the field, having two days off per week has an impact on their income. This fiscal year, we will select sites at which to trial eight-day closure per four weeks, in addition to six-day closure per four weeks, based on other trial data collected in the field. As part of my own responsibility, I am committed to controlling overtime. I also hope that employees will work on shortening their working hours so that they can spend the extra time enhancing their personal life, educating themselves or enjoying time with family and friends. This, I believe, will lead to a vitalized workforce.

## Long-term Management Targets

When we developed the Mid-term Management Plan 2016-2018, we also formulated the Group Vision and the Long-term Management Policies for accomplishing the vision for the next 10 years in light of the declining population and the shrinking domestic market. As long-term management targets for the sustainable growth of the SMCC Group, we set numerical targets for operating profit on sales of 5% or higher, something that must be secured constantly, and for percentage of overseas business of around 30%.

### Operating Profit on Sales of 5% or More

In order to constantly maintain operating profit on sales at 5% or higher, it is indispensable to particularly achieve results in production system reform among the themes of the current Mid-term Management Plan. To improve productivity, we not only need technological development, including precasting, Building Information Modeling (BIM), Construction Information Modeling (CIM) and mechanization, but must also incorporate artificial intelligence (AI) over a long time span of 10 years. Product development considering new needs of society will also be crucial. As we believe that these new technologies, mechanisms and products will be produced by workers, we will make continued efforts to proactively improve the skills of our employees as well as various types of skills of our partners.

### Percentage of Overseas Business of Around 30%

In case of future shrinkage of the domestic market, we must also increase overseas sales to 30% from around 15% today. We aim to achieve 80 billion yen in the three-year period of the Mid-term Management Plan, but we will aim for higher goals by building execution and sales systems outside Japan. As building these systems overseas requires both time and experience, we have a policy to first provide employees in Japan with education so that they will become able to operate business outside Japan, and then build local organizations and secure local partners.

### Promoting CSR in Management

The Long-term Management Policies also promote CSR in management. Particularly to address social issues through business, renovating old infrastructure is the most pressing and important issue. When we replace precast prestressed concrete (PC) floor slabs of expressways, we take a technological approach to improve productivity based on technologies and expertise we have acquired through bridge construction projects. This is an extension of our strength in precasting and prestressed concrete technologies, and one of the areas we should work on aggressively.

We also have technology for seismic retrofitting, which means modifying existing buildings to have a seismic isolation structure while they are being used. We have applied the technology not only to collective housing complexes but also to public facilities, and would like to expand our business in this area. We believe that adding another 50 years to the life of a 50-year-old building with seismic retrofitting has great social significance.

Besides these, we are focusing on a floating solar power generation system. In May 2017, we started construction of a 2,600 kW floating solar power generation plant, as our own project, with about 9,500 solar panels floating on an agricultural reservoir in Kita-gun, Kagawa Prefecture. Annual energy production of the plant is expected to be about 2.9 million kWh. Our floating solar power generation system features a structure that will not submerge even when damaged. We have received many inquiries from outside Japan, and performance and quality confirmation testing by the Government of Singapore has been completed. Therefore, we will aggressively promote the system outside Japan. This business is quite useful for addressing global warming, and allows Sumitomo Mitsui Construction to contribute to the international community.

## Promoting Work Style Reforms (Work-Life Balance)

I have an ideal image of Sumitomo Mitsui Construction as a company where employees enjoy their work and can balance their work and personal life so that they can marry and have and raise children without any work-related concerns. Accordingly, I am promoting work style reforms and the development of programs that support work-life balance. Although many female employees are being assigned to the field in recent years, it is true that married employees in general, regardless of gender, face challenges, including in relation to their place of work and work hours. If, pressed to choose between their personal life and work, they consequently resign from their job, it is a great loss to the company and to the employee's career. Therefore, we are considering solutions for this.

Meanwhile, population decline is the leading social issue facing Japan. To address this issue, shortening working hours, which I mentioned earlier, as well as diversity and support for work-life balance, will also be increasingly important.

## Consideration for Work in the Field

Lastly, I would like to refer to consideration for work in the field, which I have valued ever since I became president. "The field" is the core of the SMCC Group's business. Two-thirds of our employees work in the field every day. The quality we provide and our contact with society depend mostly on the field. Therefore, office-based departments that support work in the field and departments that develop new technologies must, as a basic rule, always ask themselves whether what they intend to do will really help those in the field. I also hope that people engaged in in-the-field work care about the field like they care about their own families and always think of safety and quality. I believe that as we maintain consideration for the field when pursuing everyday operations, our diverse stakeholders, including customers, shareholders, employees, related companies and neighbors, will recognize the faith and sincerity of Sumitomo Mitsui Construction, which will open doors for restoring creditability and allow us to be a better company.

I am hopeful that this report will help readers understand Sumitomo Mitsui Construction.

September 2017

**Hideo Arai**

Representative Director  
President & COO





# We Are a Comprehensive Construction Company Committed to Building Infrastructure That Improves Safety and Convenience for People Everywhere

As a corporate group responding to diverse needs that change with the times, the SMCC Group is operating business that expands its domain of interest around the world, including improving social infrastructure that supports local development, by taking advantage of its technologies and expertise for building infrastructure that it has acquired in civil engineering and building construction. Through the construction business, the SMCC Group aims to provide enduring value, giving first priority to being creditable with customers.

## Domestic Civil Engineering



### ■ Business Overview

Our civil engineering business provides optimum technologies for design, execution and maintenance of civil engineering structures that support social infrastructure, such as bridges, tunnels, railways and water and sewage facilities, all of which are indispensable to urban life.

Our strength lies particularly in having the industry's top experience in design and execution in prestressed concrete (PC) bridges. We provide high quality, durable and easy-to-maintain bridges by promoting technological development, including new structural forms or precasting for shorter construction periods and labor-saving execution. We also develop social infrastructure using technologies and expertise supported by our wealth of experience in wide-ranging areas including tunnels, dams, urban civil engineering, rivers, land development and energy facilities.

## Domestic Building Construction



### ■ Business Overview

Our building construction business creates well-rounded, safe living spaces tailored to the needs of customers in wide-ranging sectors, from collective housing as the core of our business to commercial facilities, distribution warehouses, offices and production facilities in various industries.

Seeing ourselves as a top runner in collective housing, which has been our focus for many years, we aggressively push forward with the development of technologies and products for high quality and high functionality, and work on new value creation for residents and users in a manner unique to a construction company. We also provide facility maintenance and restructuring that are indispensable to making facilities disaster-resistant or to customers' business development.

## Overseas Business



### ■ Business Overview

Taking advantage of networks we have built in Asia ahead of others, we support Japanese companies in entering overseas markets and participate in ODA projects in order to play a part in building bases that support the development of international society.

The Neak Loeung Bridge (Cambodia) and the Second Mekong International Bridge (Thailand-Laos) we constructed along the economic corridors crossing Southeast Asia, for instance, have not only eased traffic congestion but also improved the efficiency of transportation networks, contributing to the promotion of local industries and improvement of urban environments. Based on the cutting-edge technologies and optimum process management that we developed in Japan, we will offer proposals that best fit the local environment, share our spirit of being committed to building infrastructure, and operate a construction business that is supported by high-level safety management and quality control systems.

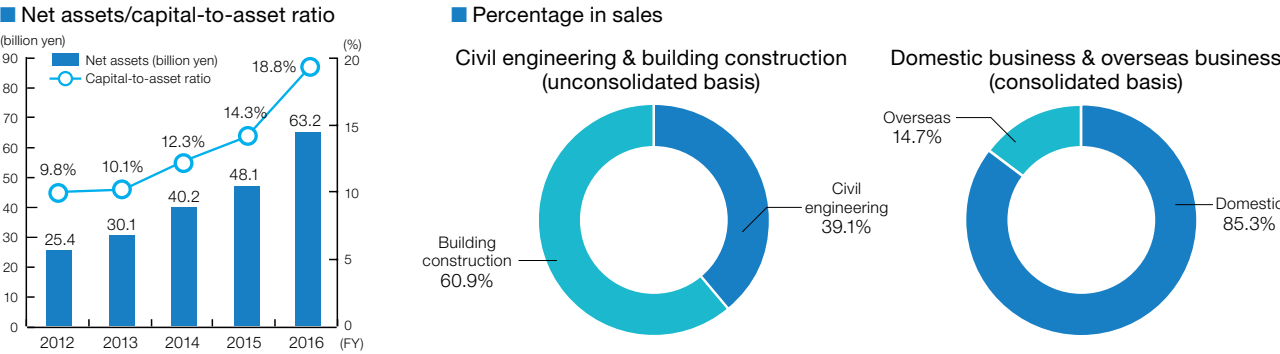
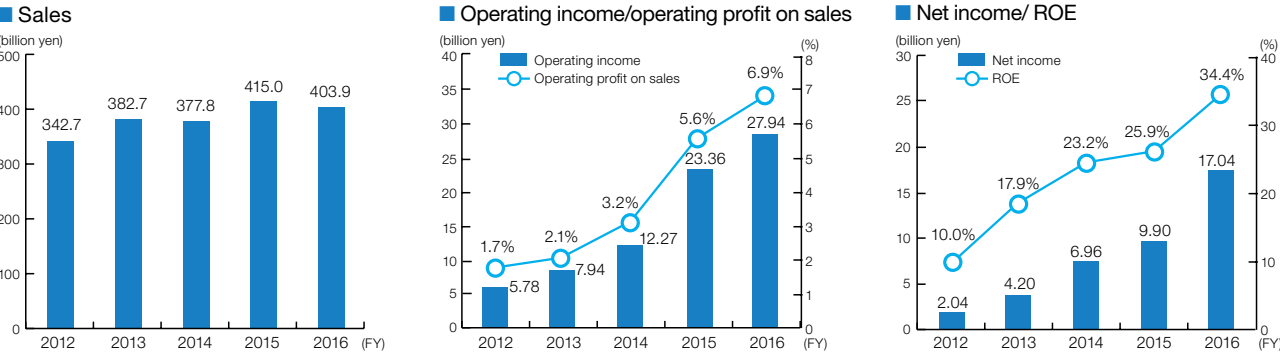
## Business Innovation & Incubation



### ■ Business Overview

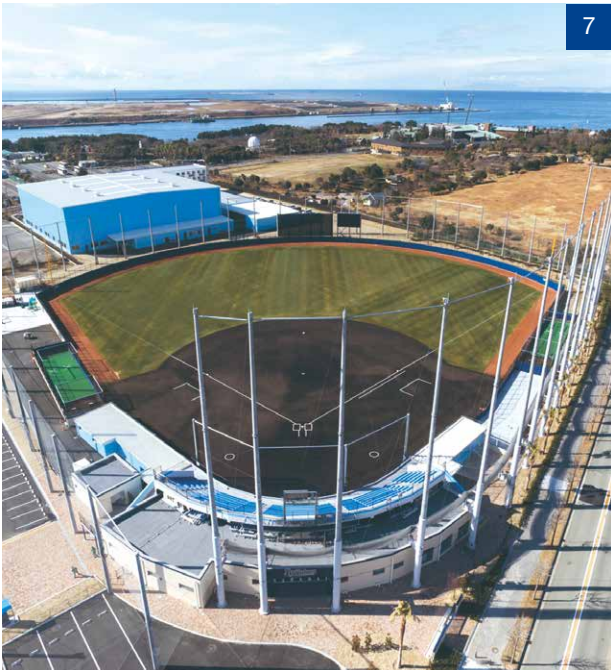
To satisfy diversifying customer needs and address dramatically changing social issues, we take on challenges in new business areas regardless of the conventional areas of business and styles adopted in the broader construction industry.

What we particularly focus on is projects that address social issues, such as participation in the operation of public facilities using private sector expertise, renewable energy using unused land or reservoirs, and mid- to large-scale wooden buildings aimed at the revitalization of domestic forestry and reforestation. We provide various solutions combining our accumulated expertise and new ideas.





# Key Projects Completed in Fiscal 2016



- 1 Soka Matsubara Housing Complex (tentative name) Zones A & B Construction (Contractee: Sumitomo Realty & Development Co., Ltd.)
- 2 Tsukuba Express Line Double Track to Rail Yard Base (Contractee: Japan Railway Construction, Transport and Technology Agency)
- 3 Odanaka Purification Plant Renovation (Contractee: Tsuyama City, Okayama Prefecture)
- 4 Shin-Meishin Expressway Mukogawa Bridge (Contractee: West Nippon Expressway Co., Ltd.)
- 5 Shibaura Institute of Technology Toyosu Junior and Senior High School (tentative name) Construction (Contractee: Shibaura Institute of Technology)
- 6 LaLaport Hiratsuka (tentative name) Construction; LaLaport Hiratsuka Multistory Parking Garage (tentative name) Construction (Contractee: Hiratsuka Special Purpose Corporation)
- 7 Orix Buffaloes Maishima Stadium Construction (Contractee: Osaka City Dome Co., Ltd.)



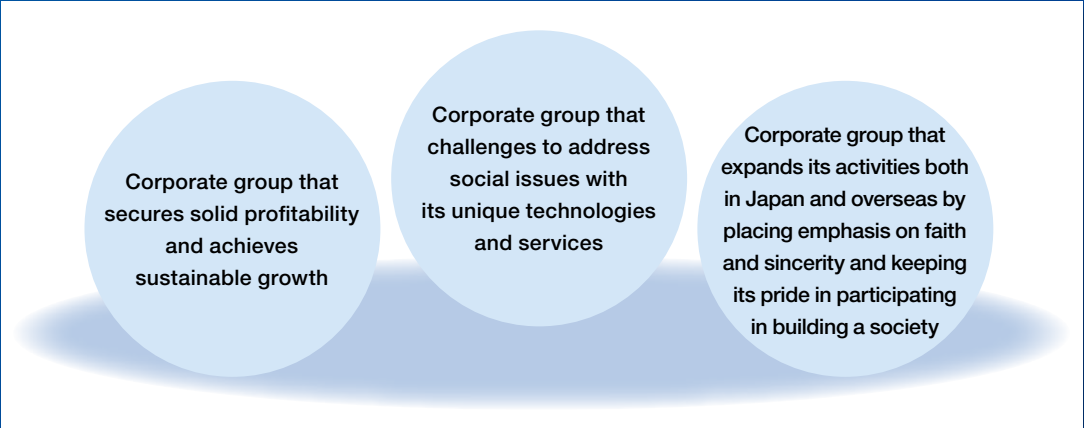
# To Be a Company That Continues to Sustainably Grow to Create New Value

Sumitomo Mitsui Construction aims to be a corporate group that addresses various social issues with its technologies and expanding its domain to construct societies both in and outside Japan. Inheriting a spirit of faithfulness, honesty and sincerity—the “DNA” of our predecessors, Mitsui Construction and Sumitomo Construction—we are committed to providing value that has execution quality at its core. Keeping in mind our mission of supporting the basis of everyday life, we are working on day-to-day operations with high levels of skills and pride, aiming to be an attractive company.

To achieve the Group Vision comprising our aspirations, we will clarify management issues and policies from a long-term perspective and endeavor to maximize earnings from each business while taking on challenges in new business fields in immediate response to changes in the business environment. Our Mid-term Management Plan 2016-2018, which we positioned as the first stage of such efforts, sets the theme of restoring creditability and enhancing our corporate value, and focuses on such issues as securing quality, improving productivity, retaining workers and cultivating human resources. Centering around two focus themes, we are making all-out efforts for improvements and reforms.

From page 13 to page 38, we introduce our value creation stories: how the SMCC Group will address social issues and improve its corporate value based on its Group Vision and Policies shown on the right page.

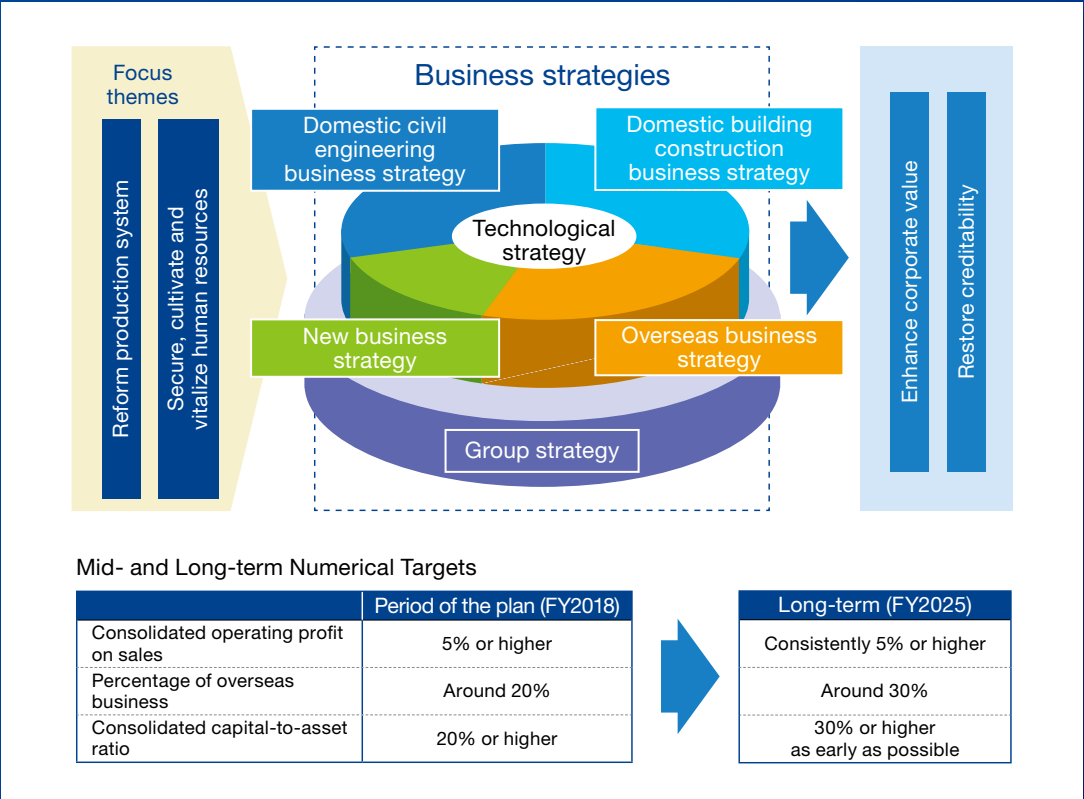
Group Vision (Aspirations)



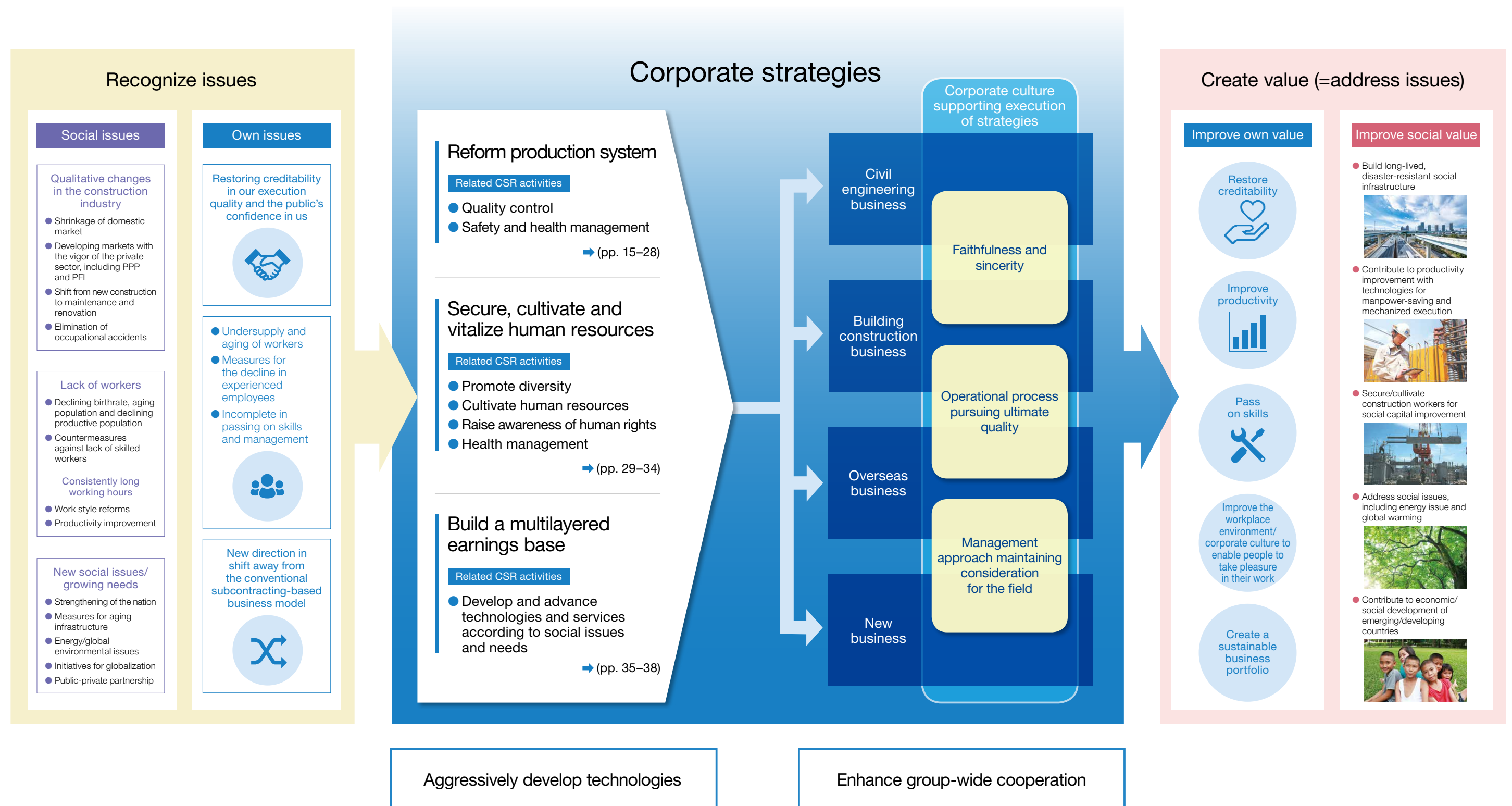
Long-term Management Policies for Accomplishing the Vision

- I. Enhance manufacturing capability—Commitment to quality and process
- II. Create an attractive corporate culture—Workplace environment and corporate culture that enable people to take pleasure in their work
- III. Strengthen the competitiveness and profitability of construction business—Win the competition
- IV. Build a multilayered earnings base enabling us to respond to changes in the business environment—Unfailingly grab opportunities
- V. Promote CSR in management—Fulfill social responsibility

Mid-term Management Plan 2016-2018



# Overall Picture of Value Creation Stories



Governance supporting strategies of Sumitomo Mitsui Construction and their execution



## Reform Production System

# As a Company Continuing Sustainable Growth, We Are Reforming Our Production System to Create New Value

## Reform Production System

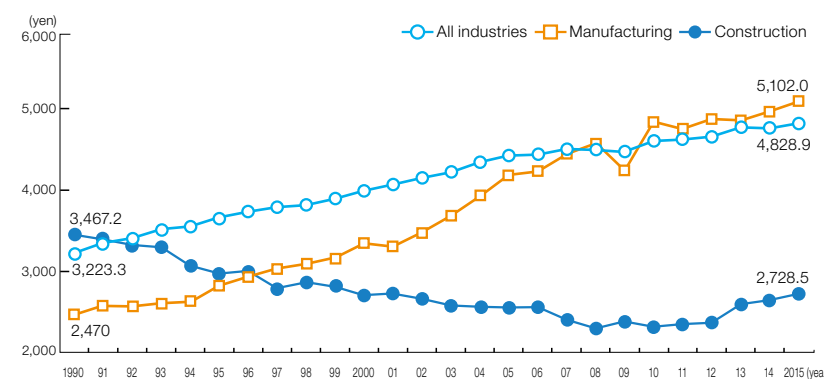
- (1) Ensure compliance with construction-related laws and regulations, prevent recurrence of quality defects
- (2) Improve the working environments at sites, enhance cooperation with partners
- (3) Improve productivity with the use of IT, standardized design and industrialization
- (4) Enhance the safety management system
- (5) Establish an organization that promotes efforts to achieve 1 through 4 above



## Social Issues

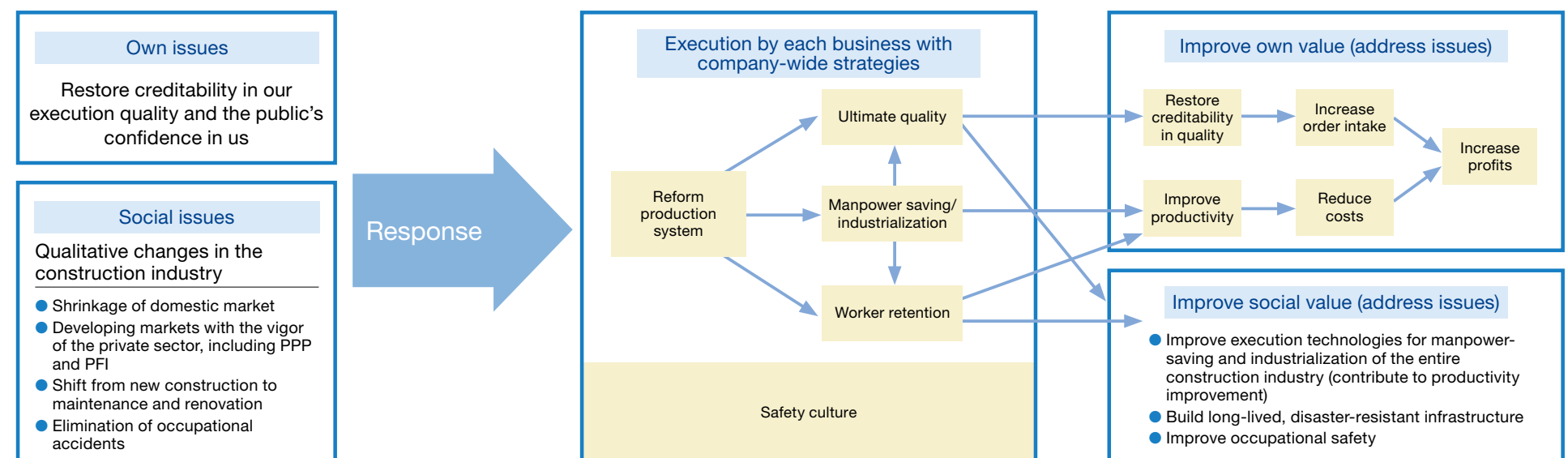
Skilled construction workers, who numbered 3.43 million as of fiscal 2014, are rapidly aging. It is predicted that one-third of them will leave the industry by fiscal 2025. The Japan Federation of Construction Contractors is making efforts to lower the average age of workers through the retention of human resources, particularly young workers, to continue to be able to provide better construction services at reasonable prices while also improving productivity, which compares unfavorably with other industries, especially in recent years.

## Labor productivity



Real value added per worker per hour (see Japan Federation of Construction Contractors, *Construction Industry Handbook 2017*)

## Sumitomo Mitsui Construction's Value Creation Stories





# What Does Reforming Our Production System Mean?

To be trusted by society and continue to achieve sustainable growth, it is crucial for us to deal with the social issues that surround us, as well as our own issues, and develop a mechanism to continue creating new value. To that end, we are reforming our production system across organizational borders, regardless of stereotypical patterns.

Some of the issues that the construction industry must deal with include worker retention and productivity improvement, regarding which little improvement has been made compared with other industries. Skilled construction workers numbered 3.4 million in fiscal 2014, but, due to aging, the number of construction workers is likely to decrease by 1.3 million by 2025. The industry needs to retain 90,000 new workers every year, save the manpower of 350,000 workers, and improve productivity.

In response to these issues, the Mid-term Management Plan 2016-2018 sets reforming our production system as one of the two focus themes. "Production system" refers to production (design and execution) processes in construction, as well as all organizations and systems involved in such processes. For the reform, we are integrating technologies and human resources across organizational borders, including across the division between civil engineering and building construction as well as across the division between internal organizations and external partners, and making all-out efforts to reform our production system regardless of conventional ways of engaging in the construction business.

## Major Initiatives to Reform the Production System

To reform our production system, we aim at achieving the ultimate level of quality that lives up to our customers' confidence in us. To that end, we are determined to improve productivity with standardization and industrialization, improve the working environment toward worker retention, and enhance the safety management system.

As measures for productivity improvement, we are aggressively promoting the use of ICT, standardizing operations, and introducing industrialization methods for saving labor and manpower, with the goal of improving efficiency of existing operations in the processes from design to execution and maintenance. Aggressive use of mobile tools and other devices makes it possible to automate, store and organize administrative documents while at construction sites, and therefore is expected to significantly save labor in operations that otherwise place heavy workloads on employees. We are implementing such measures to improve productivity at sites while enhancing cooperation with office-based departments, group companies and partners. These efforts allow cross-sectoral distribution of operational loads that were formerly performed only on-site, and contribute to improving the labor environment. Promotion of efficiency improvement for site operations stimulates such initiatives as supporting cultivation of skilled workers and allowing workers to take a day off, provided that proper construction periods are ensured, to improve the working environment at sites. These initiatives will lead to worker retention in the future.

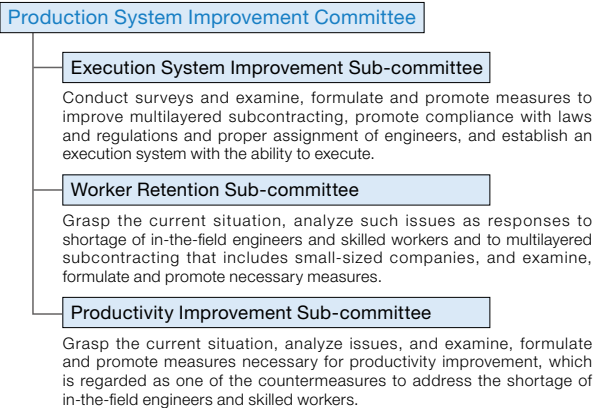
Meanwhile, as we regard precasting technology and

industrialization technology, which are increasingly used in our main business areas of civil engineering and building construction, as technologies that contribute to further production improvement, we are promoting the use of these technologies and working on further technological development. We aim to sophisticate precasting technology, which we have nurtured in Japan, with production automation and labor-saving, and apply it to projects outside Japan.

Prerequisites for these measures are initiatives for securing quality and safety. Under the Mid-term Management Plan, which sets targets for achieving ultimate quality and establishing a safety culture, we ensure compliance not only with laws and regulations but also with execution steps during execution, prevent recurrence of quality defects, and improve execution systems for these purposes. In safety management, we ensure the implementation of the plan-do-check-act cycle, enhance the organizational safety management system, and properly operate the Sumitomo Mitsui Construction Labor Safety and Health Management System. Giving first priority to being creditable with customers, we prioritize ensuring quality and safety in production processes.

## System to Promote Reform of the Production System

To reform our production system, we established the Production System Improvement Committee. For the improvement of the execution management system and other issues, the committee comprehensively addresses extensive issues, including productivity improvement as a response to and countermeasure for the undersupply of in-the-field engineers and skilled workers as well as multilayered subcontracting that includes small-sized companies, by grasping the current situation, analyzing the issues, and examining, formulating and promoting necessary measures. The committee has three sub-committees to examine, formulate and promote measures under specific themes.



## Specific Cases

### Productivity Improvement Using ICT (Information and Communication Technology)

To improve productivity of in-the-field operations, we promote the use of ICT in administrative work.

SMileSite is a system used at building construction sites to inspect bar arrangement in reinforcement placing, inspect the interior finish of collective housing, and manage photographs for piling work. Incorporating tablet terminals to enter test results and take photographs, the system automatically creates test sheets and photo sheets. Over the roughly two and half years from November 2014, when we started to use the system in the field, to June 2017, we introduced it to five branches and 50 sites. A trial in which it was compared with conventional operations confirmed that the system improved operational efficiency by about 43% by reducing preparations for inspections and improving post-processing. We are making a continued effort to improve the system, increasing the items to be covered by inspections and responding to requests for improvement received after its introduction. We will consider adopting a more intuitive interface, taking into account the development of the communication environment and wearable terminals, and will enhance training on how to use the system to promote enhanced efficiency in inspection operations with the improvement and wider use of the system.



Equip tablet terminals with execution management functions to inspect bar arrangement, take photographs of bar arrangement, etc.



Automate creation of check sheets and photo sheets

### Precasting and Initiatives for Production System Improvement

For labor-saving and industrialization in execution, we focus on the technology for precasting of concrete skeleton and on production capacity improvement at our plants. To improve productivity in the field, we are aggressively adopting precasting, which involves production of reinforced concrete (RC) members at plants or in production yards and joining the members at the construction site. Intensive production at plants with precasting allows fine-tuned quality control, saves labor in in-the-field reinforcement placing and formwork, and enables workers to perform work in parallel, which is expected to improve productivity. It also enables even unskilled workers to join precast concrete (PCa) members in the field, which saves labor in the field.

We have five production sites, including those of our group company, across Japan. We integrated subsidiaries that operated the Tochigi Plant and the Ibaraki Plant to create SMC Preconcrete Co., Ltd. Since the start of its operation in April 2017, the new company has improved its production capacity to handle even large-scale construction work, allowing the SMCC Group as a whole to develop a system to receive orders for large-scale projects.

#### SMCC Group Concrete Product Plants

- Sumitomo Mitsui Construction Notogawa PC Plant
- Sumitomo Mitsui Construction Niihama PC Plant
- Sumitomo Mitsui Construction Mitagawa PC Plant
- SMC Preconcrete Tochigi Plant
- SMC Preconcrete Ibaraki Plant





# Initiatives in Civil Engineering

We reform our production system at construction sites to ensure a strong and stable business foundation by promoting productivity improvement with aggressive use of ICT in production processes as well as with precasting and other technologies that we have accumulated through bridge construction projects.

The shrinking labor force is an unavoidable issue in the construction industry. To continue to build and maintain high-quality and highly durable infrastructure, improving productivity and securing and cultivating workers are indispensable. Against this background, our civil engineering business is working on the reform of our production system at construction sites by promoting rapid construction with operational efficiency improvement using ICT and saving manpower and labor using precasting and other methods.

According to the market forecast, investment in new construction projects will decrease while more focus will be placed on the expansion of maintenance and renovation of aging social infrastructure built during the period of Japan's rapid economic growth. Large-scale renovation plans have already been launched, primarily by expressway companies. Outside Japan, infrastructure investment, which is associated with economic development in Asia, remains strong, and we hope to apply technologies that we have nurtured in Japan to overseas projects. We are making efforts to constantly provide new value through production system reform.

## Promoting the Use of ICT in In-the-field Operations

The use of ICT in production processes has dramatically improved the efficiency of management work in the field.

One example of this is our "AR-based surface finish control system," which enables us to control, using stereo photogrammetry technology and augmented reality (AR) technology, the surface shape of concrete floor slabs in concrete placement in the field. The system renders the results of measurement, which is performed while concrete is being poured, as a 3D data image and superimposes the image on the image of the project site using AR technology

for visualization. It allows us to improve the evenness of the finished surface as we are working on it, which improves the efficiency of quality control operation in the field.

For the construction of prestressed concrete bridges that have complex shapes incorporating slopes and curves, we are using the SMC-modeler, our proprietary system to efficiently create highly accurate 3D drawings of bridge models using linear coordinate data and coordinate data of cross-sectional shapes, which are used at the design stage. As the system creates 3D models from coordinate data, such as linear data, it can create a 3D model for the entire project site by superimposing the 3D bridge model onto the project site landscape at the exact position, as measured with a drone. The system enables us to quickly and unfailingly check interference between members and identify any conflict with local geography and structures.



Height management using tablet terminals



Synthetic view of an automatically created image of bridge and the landscape captured by a drone

## Improving Productivity with Precasting

Ever since prestressed concrete technology was introduced to Japan, Sumitomo Mitsui Construction has developed related technologies, including precasting for bridges and various methods for rapid construction. Our wealth of experience, including working on variations, allows us to not only improve operational productivity to cope with a shortage of skilled workers, which is one of the issues confronting the industry, but also to build high-quality, durable infrastructure. For instance, our use of the SPER (Sumitomo Mitsui's Precast Form for Earthquake Resistance and Rapid Construction) method, which we developed for bridge construction, is increasing in recent years. The SPER method allows for rapid construction as precast members with embedded hoop reinforcement are raised and filled with concrete to build bridge piers. By saving labor associated with the joining of reinforcing rods and frames on-site, this method can shorten cycle processes by half compared with conventional processes.

As for rapid construction of the bridge superstructure, we are aggressively using precast segments of various shapes to install girders (superstructures). Currently, large-scale projects in overseas countries pushing ahead with rapid infrastructure development are adopting epoch-making rapid construction using precast segments. Hopefully, the proactive introduction of technologies nurtured in Japan to overseas projects will continue and, together with technology to shorten the

construction period for the early start of service, will contribute to local economic growth and development. Moreover, execution methods using precast members are effective not only for labor saving but also for securing the safety of work in high places. We will continue to propose optimal methods for overcoming various site conditions.

## Initiative in Infrastructure Renovation

In the expanding area of social infrastructure renovation, we have developed and put to practical use technologies for external cable repair to repair and reinforce bridge structures, continuous fiber reinforcement, large cross-section repair and others. We have applied these technologies to many projects. For example, to execute expressway floor slab replacement, which is likely to become a large market, lanes must be closed while the expressway remains in service. The task must therefore be completed quickly and definitively. To that end, we developed a new joint structure as a technology to improve execution efficiency for precast prestressed concrete (PC) floor slabs, and adopted it when we built the Chugoku Expressway Shimo-kumatanigawa Bridge in fiscal 2015. We also used the structure in other floor slab replacement projects, including the Chugoku Expressway Omine Bridge in fiscal 2016. We are committed to further efficiency improvement.



World's largest span-by-span bridge construction (Lach Huyen Bridge, Vietnam)



Installing precast PC floor slabs

Employee Talks about

Specific Case

### Cantilever Bridge Construction Management Using ICT

In bridge construction, we check the height of the bridge and size of members, confirm the placement of reinforcement rods and PC steel<sup>1</sup> in the girder, and control the quality of concrete. On-site employees used to spend many hours on quality control and paperwork for each execution process. In the National Highway No. 45 Natsui Bridge construction project, we introduced ICT for execution management and paperwork, using tablet terminals for measurement and other devices. We are using ICT to save labor and improve productivity.

<sup>1</sup> PC steel: highly durable steel that provides prestressed concrete with tension

#### National Highway No. 45 Natsui Bridge construction

- Contractee: Tohoku Regional Development Bureau, Ministry of Land, Infrastructure, Transport and Tourism
- Site location: Kuji City, Iwate Prefecture
- Builders: Joint venture of Sumitomo Mitsui, Abe Nikko Kogyo, and Nippon PS
- Execution period: April 1, 2016–March 19, 2018



Yoshihiko Taira  
Project Manager  
Natsui Bridge Construction Project  
Tohoku Branch

Employee Talks about

Specific Case

### Expressway Floor Slab Replacement

At the site of slab replacement, we occupy a two-lane segment to execute the replacement while traffic control switches the opposite lanes of the segment to two-way traffic for a designated period. We must therefore execute our task efficiently and with due consideration to safety. We adopted a new joint structure, developed by Sumitomo Mitsui Construction, for the joint of precast PC floor slabs, and consequently confirmed a remarkable improvement in operational efficiency. Currently, we are identifying issues in each work process that we obtained on-site, examining measures and planning to apply the joint structure to future projects. We will continue to refine our execution expertise to further improve efficiency in floor slab replacement.

#### Chugoku Expressway (Specified Renovation) Shimo-kumatanigawa Bridge (outbound) floor slab replacement

- Contractee: West Nippon Expressway Co., Ltd., Chugoku Branch
- Site location: Shimo-kumatanigawa, Niimi City, Okayama Prefecture
- Execution period: October 30, 2015–January 21, 2017



Naofumi Ando  
Civil Engineering Renovation Department  
Civil Engineering Division

# Initiatives in Building Construction

Taking advantage of unique construction technologies that we have nurtured, we continue to build high-quality and functional large-scale high-rise collective housing and to improve productivity in non-residential building construction for various purposes.

The building construction market environment continues to be dynamic thanks to a combination of factors such as facilities related to the Tokyo Olympic Games, increasing capital investment and renovation investment due to improved corporate earnings, moves for urban redevelopment, and plans for large-scale projects based on new business schemes across Japan. Under these circumstances, in the area of housing, which is our key strength, we are enhancing our initiatives focusing on high quality and functionality. In non-residential building construction, we are making further sales and technological efforts based on data analysis in order to respond to the needs of diverse customers and receive as many orders as possible by leveraging our advantage as a member of both the Mitsui Group and the Sumitomo Group.

Placing utmost priority on restoring creditability, which is the major theme of the Mid-term Management Plan 2016-2018, we are making improvement efforts for customer satisfaction. As we are improving quality control processes to prevent a recurrence of quality defects, we are thoroughly examining and reviewing production processes. Additionally, we are saving labor and manpower and promoting industrialization in production processes to provide products with higher added value. We are also working on worker retention, as well as encouraging construction workers to pass on skills, with the goal of drastically reforming the production system.

## Further Evolving Precasting Technology in Housing

For ensuring quality and eliminating defects in building construction projects, we are improving production processes by formulating a priority policy for work that tends to cause defects, particularly in collective housing construction. We are proactively using precasting in each project because promoting

precasting in skeleton work is one of the important measures for ensuring quality and improving productivity. In particular, SQRIM, a precasting method for superhigh-rise collective housing, allows us to quickly execute the construction of each floor in cycles as short as three days. The technology also enables us to supply members with stable quality and address the shortage of skilled workers. For this reason, we are aggressively applying the technology to our projects.

To meet the future increase in demand, we have integrated two production plants of one of our group companies that play a part in supplying members for precasting. We are also improving the production process on the manufacturing lines to further improve availability. Currently, we are improving efficiency to a revolutionary degree by using precasting in large-scale projects, including the development of 915 units for the Olympic Village in Harumi built for the Tokyo Olympic and Paralympic Games.

## Enhancing ICT Use to Strengthen Non-residential Building Construction

To mitigate against any future shrinkage of the housing market, we are stepping up our efforts in the area of non-residential building construction, including enhancing the assignment



of personnel to departments related to sales, design and execution and enhancing educational programs. We are improving and standardizing in-the-field operations, particularly by passing on skills and expertise regarding large-scale commercial facilities and production facilities, in which we have a wealth of experience, and introducing technologies that can be used for many other purposes.

For instance, in the execution processes for large-scale commercial facilities, we promote the use of GPS systems to instantly and accurately grasp information—such as the position of pilings across a vast project site—and the introduction of tablet terminals as a tool for on-site execution management. This is producing significant effects in operational process reforms and productivity improvement. We are also improving on-site network environments, particularly wireless LAN environments, and implementing measures to improve management work efficiency, quality checks and inspection accuracy.

Execution simulation using BIM is bringing reform, particularly in production process operations. For example, when we constructed a hall at the Yamazaki Baking Co., Ltd. Central Laboratory, we progressed from planning to execution by creating a highly accurate 3D-printed model for the construction of the roof, which has a complex design of lattices on a curved surface, and simulating the detailed execution steps to understand the complex shape. In the case of Akagane Museum, which we constructed in Niihama City in Ehime Prefecture, we used 3D modeling data for drawings to be used for the construction of the complex reinforcement structure that supports the exterior walls. We computerized



3D modeling data (left) and completed state (right) of Yamazaki Baking Central Laboratory Hall

Employee Talks about Production System Reform

## Infilling Business—Improving Efficiency with Cross-Operational Consolidation of In-the-field Operation

The collective housing business requires cumbersome peripheral operations (infilling operations) as well as in-the-field operations that cover safety, quality, processes and costs. For in-the-field productivity improvement, the infilling business separates peripheral operations from the field and handles them under a dedicated section. For instance, with the cooperation of specialized staff, engineers rehired after reaching the age of retirement, and staffing partners, we have established a team that can efficiently, effectively and intensively respond to important needs connected to purchaser satisfaction, including accepting requests for changes in optional works for a newly purchased collective housing unit, making estimates for such requests, holding preview events, and providing regular after-purchase services.



Yoshiaki Sakaguchi  
Infill Group Leader  
Building Construction  
Department No. 2  
Tokyo Building Construction Branch

the weight, area and other information concerning structural members to save labor in drawing creation and check interference with internal gutter paths. This also contributed to facilitating communication between the parties concerned and improving execution accuracy.

## For New Product Development Pursuing Value Creation

Overseas markets, which we see as growth markets, are recognizing the value of our proprietary method, SQRIM, as a new technological product. For concrete pipe rack construction at a petrochemical plant in Malaysia, our proposal to reduce the construction period by more than half by using SQRIM for rapid construction was adopted. Using SQRIM actually reduced the period for skeleton work by 70% compared with an alternative conventional method. Additionally, systematic plant-based production allowed for the stable supply of high-quality members. We will apply the method to tower construction outside Japan.

Increasing overseas projects require us to secure personnel for execution management. We have established a human resource development center and technical support center in Manila, the Philippines to provide technical education, including support for the creation of CAD drawings of project sites. Improvement of the network communication environment at overseas locations is expected to help establish a cross-locational operational support system.

### Specific Case

#### Seismic Retrofitting for Yamanashi Culture Hall 100-Year Plan

The Yamanashi Culture Hall 100-Year Plan is a project to renovate the hall to add 50 years to its life by improving its aseismic performance with seismic retrofitting without damaging the design by renowned architect Kenzo Tange. In the seismic refurbishment project, we succeeded in executing an unprecedented task: cutting 16 large columns with the diameter of five meters below ground and installing a seismic isolation system. While undertaking the work, we avoided causing any detriment to the hall's current aseismic performance in case an earthquake struck during execution. We carried out and completed the aseismic renovation work in a systemic manner, with the media center in the building continuing to operate 24 hours a day as we worked.

Seismic retrofitting is drawing attention and being adopted in many projects as a way of improving the added value of existing buildings, including office buildings and high-rise collective housing in the heart of Tokyo, while they are being used.





# Initiatives in Technological Development

We work on technological development that contributes to enhancing our manufacturing capability in all production processes from design to execution and maintenance for productivity improvement.

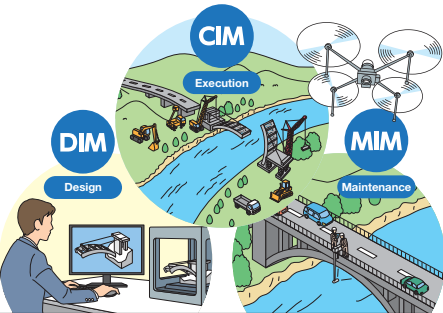
In implementing measures to enhance our manufacturing capability, as set out in the Mid-term Management Plan 2016-2018, we have developed a mid- to long-term technological strategy, as well as a technological development activity policy. As the mid- to long-term technological strategy has the basic policy of pushing forward with “reform,” “evolution” and “taking on challenges” that span the divisions between civil engineering and building construction, we are making efforts to achieve the business plan and develop innovative construction technologies.

Such efforts include saving labor and manpower with the use of ICT and improving productivity with robotization and automation technologies. We will develop innovative technologies and create added value through cross-sectoral

projects encompassing both civil engineering and building construction. Particularly in terms of technological development for productivity improvement, we promote the introduction of a construction management system using 3D modeling in all construction processes, from design to maintenance, in order to reform them. Such aggressive use of ICT in production processes aims at developing technologies for new value creation, with a view to robotizing construction work and developing automation technology with the introduction of AI in the future. At the same time, regarding the important themes of securing and cultivating technical workers who will play an active role in the future and passing on skills, we will cultivate human resources who are highly capable of technical management and enhance and use accumulated intellectual assets.

## Innovating DIM/CIM/MIM (DCM)

For the effective use of Building Information Modeling (BIM) in building construction and Construction Information Modeling (CIM) in civil engineering, we work on the development of DIM/CIM/MIM (DCM), a 3D-based total construction management system common to civil engineering and building construction. We do this through cooperation between the Civil Engineering Division, the Building Construction Division and the Technical & Engineering Service Division, with the goal of achieving sophisticated in-the-field management at every stage from design to execution to maintenance.

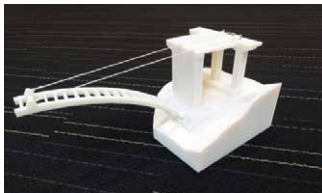


### ■ DCM<sup>1</sup> management in the case of technological development for bridges

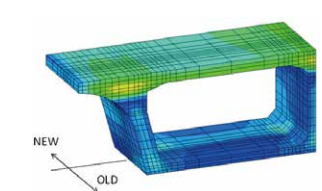
1 Design: DIM (Design Information Management)  
Execution Management: CIM (Construction Information Management)  
Maintenance: MIM (Maintenance Information Management)

#### DIM-related

Visualization technology



3D bridge modeling system



#### CIM-related

3D modeling with airborne imagery captured by drone



AR-based surface finishing control system



#### MIM-related

Bridge inspection robot camera



3D position measurement system using visible light communication



## For Promoting Development and Use of Labor- and Manpower-Saving Methods

We have leading-edge technologies and experience in the use of precast concrete, which is advocated in the i-Construction initiative promoted by the Ministry of Land, Infrastructure, Transport and Tourism to improve productivity in the construction industry. In bridge superstructure construction, we have widely adopted various types of precast segment methods both in and outside Japan. We have also constructed more and more butterfly web bridges<sup>1</sup>, which constitute the cutting-edge technology and method. Meanwhile, the SPER method<sup>2</sup>, which is used in bridge pier work, can dramatically improve productivity (shorten the construction period). By using the SPER method, we achieved the construction of the Tokai Hokuriku Expressway Washimi Bridge featuring Japan's highest pier (125 meters).

In the area of building construction, we have increased the use of the SQRIM method, which enables construction of the aboveground skeleton with precast concrete, primarily for 100-meter or higher superhigh-rise collective housing, and we are now working to further sophisticate the technology ahead of future changes in the market environment. For instance, we integrated the method with prestressed concrete (PC) technology, which has a great advantage in bridge engineering, to develop a precast prestressed concrete method called the “SQRIM PC method.” Because it improves overall productivity, including regarding the longer span and the environment and safety of demolition work, the scope of application of this method is expanding to include increasingly diverse and sophisticated distribution facilities. We are also developing hybrid methods that allow us to propose technologies that are optimal for meeting diversifying customer needs, such as methods for achieving rapid execution throughout the entire construction period from foundation work to finishing work as well as methods matched to construction site environments outside Japan.

1 Butterfly web bridge: concrete box girder bridge featuring composite structure that replaces the web with thin butterfly-shaped concrete panels.  
2 SPER method: see page 20.

## New Technological Development Initiatives Using ICT

We are implementing specific measures that proactively use ICT in both civil engineering and building construction. Systems that are being used in civil engineering include a safety control system using GPS, a 3D crane boom position monitoring system, and a system to measure geographical data using drones and create 3D models. Those used in building construction include SMileSite, a site operation management system using tablet terminals. Currently, we are working with Kyushu University on research and development of the SLAM sleeve position management system, which instantly measures the position of sleeves installed on-site by using a tablet computer based on the Simultaneous Localization and Mapping (SLAM) technology that is often used in robotics. As a system to check the position of both sleeves for pipework in building construction and deflection tubes in bridges, it can be a powerful tool for defect prevention. We are also promoting the use of ICT in the maintenance market, and accordingly developing robot cameras for bridge inspection and technology for the health monitoring of structures.

In the future, we will push forward with research into advanced technology, such as AI, to incorporate it into mechanization and automation technologies in the construction industry for integrated management of entire production processes and visualization of production processes on a real-time basis.



Sleeves for pipework



Indoor experiment using SLAM technology

## Employee Talks about Production System Reform

### Fusion with Advanced Specialized Technologies from Other Industries Creates New Value

I specialize in the development of image processing engines. I dived into this world with the intention of pursuing image processing and analysis in the construction industry. Currently, the construction business uses 3D data with BIM/CIM and seems to have a great affinity with image processing technology. My first goal is developing technology that can be a good image processing tool in the field, such as technology that can reduce the time spent on visual inspection to less than one-tenth with image analysis. What I have recently started to think is the most important thing is safety in the field, along with workload reduction and accuracy improvement of in-the-field operations. I would like to contribute to providing a safe working environment with AI-based accident risk prediction, image-based detection of abnormal health conditions of workers, and so on.



Gou Migiyama  
Construction Information  
Technology Department  
Technical & Engineering  
Service Division

# Pursuing Customer Satisfaction with Supreme Quality

Construction processes could be described as our products. Therefore, mechanisms for unfailingly securing and maintaining quality should be our top priority. Based on this belief, our Mid-term Management Plan 2016-2018 set the goal for company-wide quality activities: achieving supreme quality. In pursuit of infrastructure building that can satisfy customers, we make comprehensive efforts to change awareness of the organization and systems to achieve supreme execution quality in the field every day.

**Takeshi Sagara**  
Managing Executive Officer  
Division Director, Production Management Division



## Initiatives to Reform Production System based on Quality Policy

Sumitomo Mitsui Construction Quality Policy

**We continue to innovate our technologies and cultivate our creativity to provide customers with quality that society can trust and be satisfied with.**

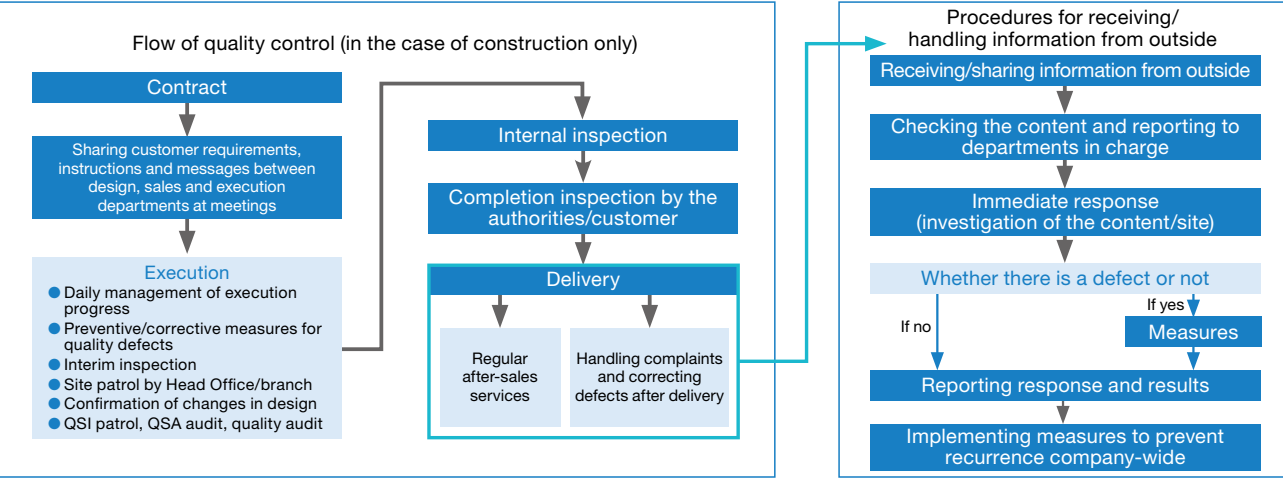
To achieve the quality that customers and society expect in all production processes, including during the design phase, the procurement phase and the execution phase, based on the above quality policy, we operate a quality management system that ensures that we achieve the clear quality target and make improvement efforts when necessary. For more effective operation of the system, we established an organization for operational improvement, led by the Production System Improvement Committee, in fiscal 2015, and started to reform the production system, particularly as to quality. It is crucial to build a mechanism for securing the proper steps and time required in the execution process so that we can continue our quality maintenance activities in a natural way. That requires us to make continued efforts for more effective process improvement while checking the effectiveness of daily operations as necessary. We improve operations by thoroughly implementing the field-oriented approach and the “three gen”

principle—referring to “genba” (field), “genjitsu” (reality), and “genbutsu” (real object)—and instilling the basic principle of “fleshing out quality through processes.” We also promote the development of a quality control system with a new production system with the proactive use of ICT, as promoted by the Japanese government’s i-Construction initiative.

## Management System

For the consistent provision of products that meet customer requirements, as well as comply with applicable laws and regulatory requirements, and improvement of customer satisfaction by the effective operation of our management system, Sumitomo Mitsui Construction, primarily at our offices and sites in Japan, operates a system certified to the ISO 9001 standard.

### Flow of quality control and flow of information from outside



## Supreme Quality as Our Aim

Our goal of supreme quality reflects our aspiration to perform quality control (manufacturing processes) that other manufacturing industries take for granted, which means to unfailingly perform management tasks, including work, quality inspection, recording, and confirmation, according to the predetermined procedures, rather than following conventional practice in the construction industry. As our quality control activities do not permit any compromises in these processes, all officers and employees should continue to improve in-the-field quality with persistence and utmost attention. As part of the

activities, we appoint safety and quality auditors as personnel dedicated to site patrol and guidance. They thoroughly perform detailed checking based on data concerning past quality defects and occupational accidents, raise awareness of key control points, perform inspections and provide guidance for improvement to prevent quality defects and occupational accidents in ongoing projects. The number of quality audits and patrols performed at civil engineering and building construction sites in fiscal 2016 reached over 1,000.

## Continued Initiatives for High Quality and Functionality

For the core business of the Civil Engineering Division and the Building Construction Division, namely, bridge and collective housing construction, we established the Bridge Quality Committee and the Quality and Functional Housing Committee with external experts to develop technologies and improve operational processes for high quality and functionality.

### Introduction of the Committees for Quality and Functionality Bridge Quality Committee

With a focus on bridges, the Bridge Quality Committee carries out activities to improve element technology specific to each of the planning, design, execution and maintenance phases, with the goal of improving quality with regard to the entire lifespan of the bridge. Fiscal 2017 marks the 11th year since the foundation of the committee (which has held 78 meetings as of the end of fiscal 2016). Working groups on the respective element technologies and the committee itself, in which external advisors participate, hold discussions to identify the direction in which technologies should move forward to meet social needs. Technologies nurtured by this committee will be used to contribute to sustainable social infrastructure development.



Photograph of specific achievement: floor slab wheel load test

### Quality and Functional Housing Committee

In pursuit of the high quality and functionality of collective housing, the Quality and Functional Housing Committee holds meetings with Professor Emeritus Masao Ando of Chiba University and Professor Kenji Motohashi of Shibaura Institute of Technology as special advisors. In fiscal 2016, its ninth year, the committee confirmed various policies, including the Building Construction Division’s defect elimination action plan and the Production Management Division’s initiatives for ensuring quality and improving productivity. The committee discussed initiatives and actions based on visits to representative collective housing projects and large-scale renovation projects and reports on the progress of housing-related initiatives and technological development. As the special advisors highly evaluated our approach to end users, the committee reconfirmed its importance. The guidance and advice received will be unfailingly provided as feedback for the management of collective housing projects and technological development for their enhancement.



Site visit by the Quality and Functional Housing Committee



Reform Production System

For the Establishment of a Safety Culture

We are improving operational safety by ensuring implementation of the plan-do-check-act (PDCA) cycle in all construction processes from planning to completion in order to eliminate accidents. Additionally, we are reforming our production system, a process that includes the development of labor-saving technology and use of ICT, to reduce possible causes of accidents.

**Kazuhiko Hirokawa**  
Representative Director, Executive Vice President  
Officer in charge of Safety & Environment Managing Department



Basic Safety and Health Policy

Under the principle of “zero-accident” infrastructure building, Sumitomo Mitsui Construction aims to protect the lives and health of its workers by providing a safe, healthy and pleasant workplace environment.

- 1. To eliminate accidents, we observe laws and regulations related to occupational safety and health as well as the Sumitomo Mitsui Construction health rules, and establish workplace rules.
- 2. To improve operational safety, we ensure the performance of repeated cycles of plan, do, check and act in all processes from planning to completion.
- 3. To improve the level of safety and health control, we cooperate with partners and carry out voluntary safety and health activities, eliminate or reduce risks and sources of harm, promote worker health, and develop a pleasant workplace environment, with the Sumitomo Mitsui Construction Occupational Safety and Health Management System as the basis of safety and health control.

Basic Safety and Health Targets

Zero deaths, critical injuries and major accidents	
Frequency rate: 0.6 or less	Severity rate: 0.02 or less

- 1. Eliminating accidents through zero risks
  - (1) Eliminating public accidents (third-party accident, property damage, public facility failure)
  - (2) Eliminating three major types of accidents (falls to the ground and falls to the floor, collapsing and overturning, accidents caused by construction machinery, cranes, etc.)
- 2. Developing a healthy and pleasant working environment

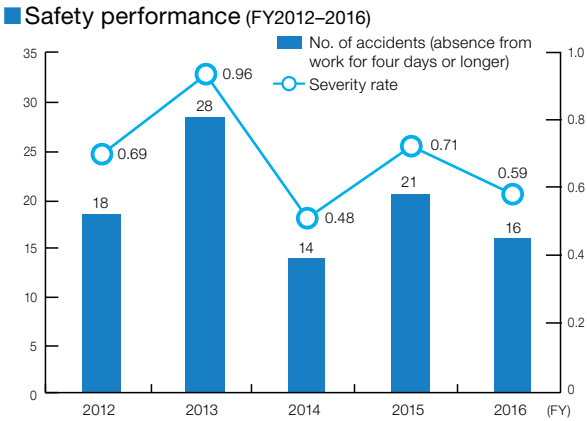
Priority Measures

- 1. Eliminating accidents through zero risks
  - (1) Improving operational safety with continued implementation of plan, do, check and act cycles
  - (2) Preventing recurring accidents by using accident case studies and complying with rules
  - (3) Complying with laws and regulations related to each site
  - (4) Improving the level of safety and health control (Properly applying the Sumitomo Mitsui Construction Occupational Safety and Health Management System)
- 2. Developing a healthy and pleasant working environment
  - (1) Promoting mental and physical health
  - (2) Developing a pleasant working environment to promote diversity
  - (3) Developing a worker-friendly workplace environment by promoting and enhancing the 4S movement
  - (4) Taking early measures for heatstroke by grasping the WBGT value in summer
  - (5) Preventing occupational diseases (Implementing and raising awareness of chemical substance risk assessment for radiation control, etc.)

Safety Performance

In fiscal 2016, the frequency rate<sup>1</sup> was 0.59, which met the target of 0.6 or less, while the severity rate<sup>2</sup> was 0.18, which did not meet the target of 0.02 or less. There were 16 cases of absence from work for four days or longer: five cases involving a falling object, four cases involving a fall to the ground, four cases involving a fall to the floor, and three other cases.

1 The frequency rate represents the frequency of occupational accidents. The rate shows the number of fatal or serious injuries due to occupational accidents per one million hours worked.  
2 The severity rate represents the severity of accidents. The rate shows the number of lost workdays per 1,000 hours worked.



Safety Patrol

Even when safety control is thoroughly implemented by employees on-site, accidents may occur due to unsafe facilities resulting from an oversight or unsafe actions. Our Head Office, branches and partners carry out safety patrols in a planned manner to eliminate any overlooked risk factors in order to prevent accidents. Additionally, our president boosts safety awareness by taking the initiative in joining safety patrols and conveying the top management’s approach to safety to all workers.



Safety lecture by the president during a safety patrol

Cooperation with Sumitomo Mitsui Construction Shineikai

To facilitate construction work and enhance safety activities for the growth of Sumitomo Mitsui Construction and the prosperity of its member companies, Shineikais, organizations comprised of our partners, are formed at our 10 branches.

The Shineikai Association, comprised of branch-level Shineikais, carries out activities for strengthening the structure of member companies, improving productivity, ensuring quality and preventing occupational accidents through cooperation between branch Shineikais and with Sumitomo Mitsui Construction.

We recognize excellent branch-level Shineikais, partners, foremen, etc. to vitalize the Shineikai program. We also hold a presentation of cases in which operational safety measures led to improvements as part of our effort to enhance communication and raise the standards of Shineikai member companies’ site management in terms of quality, safety, cost and processes.

Jointly with the Shineikai Association, we created a DVD on safety education for on-site work, which is now used as an education material when partners send workers to sites and when sites take on new workers.



Presentation of cases of improvement



Safety education DVD

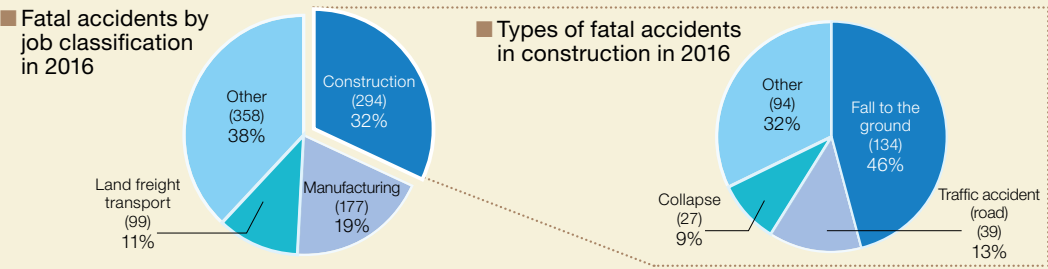
Partner's Voice

Making Efforts to Eliminate Occupational Accidents

I recognize that the elimination of occupational accidents is the biggest issue for any company running a construction business. Falls to the ground consistently account for about 40% of all accidents involving loss of life in the construction industry. Reducing accidents caused by a fall to the ground will lead to a significant reduction in occupational accidents. To that end, it is crucial that all who engage in on-site work, whether prime contractor or subcontractor, share a “safety first” approach and accident elimination awareness, speak out to correct unsafe facilities and behaviors regardless of their position, and raise each other’s awareness for further improvement. Through Shineikai activities, we will make concerted efforts to work with Sumitomo Mitsui Construction to eliminate occupational accidents.



Ken Odagiri  
Chairman  
Shineikai Association





## Secure, Cultivate and Vitalize Human Resources

# We Focus on Initiatives for Passing on Skills and Developing Global Human Resources, and Improve the Workplace Environment to Achieve Work-Life Balance

## Secure, Cultivate and Vitalize Human Resources

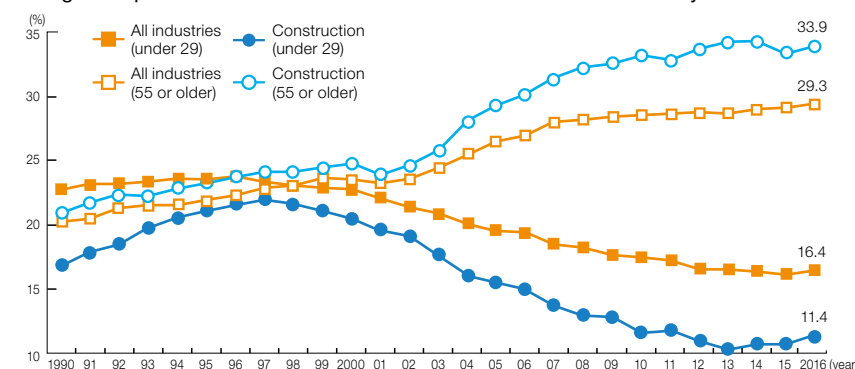
- (1) Secure human resources
  - Promote diversity
- (2) Cultivate human resources
  - Build an OJT support system to pass on skills
  - Build global human resource development programs
- (3) Vitalize human resources
  - Improve the working environment and treatment of workers to achieve work-life balance



## Social Issues

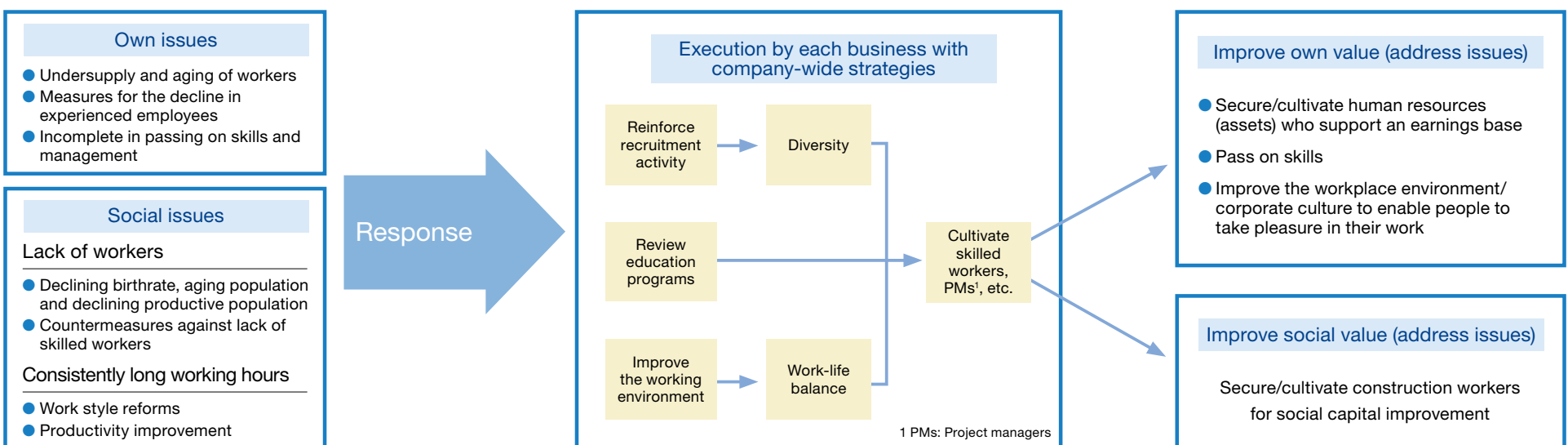
While robust construction investment is likely to continue in line with infrastructure improvement aimed at strengthening the nation, preventing and mitigating disasters, and renewing aging infrastructure, the retention of skilled construction workers for these construction projects is a big issue. As projects become larger and acquire more internal divisions, workplace environments where workers are educated and skills are passed on are being lost. Accumulating and honing the skills and expertise needed for addressing diversifying customer needs will be a major issue in the future.

■ Age composition of workers: all industries vs. construction industry



Source: Progressive Aging of Construction Workers (see Japan Federation of Construction Contractors, Construction Industry Handbook 2017)

## Sumitomo Mitsui Construction's Value Creation Stories





# Securing, Cultivating and Vitalizing Human Resources

The greatest asset in the construction business is human resources (human assets). The development of a working environment and corporate culture where all people involved with the SMCC Group enjoy their work and are motivated to work hard leads to the improvement of long-term corporate value. Therefore, under the Mid-term Management Plan 2016-2018, we are launching measures to improve the working environment and treatment of employees in order to secure and cultivate workers and ensure skills are passed on, while at the same time formulating and implementing measures to promote workforce diversity and cultivate global human resources who will play active roles in our future overseas business.

**Shoji Kimijima**  
Director, Senior Managing Executive Officer  
Division Director, Administration Division



## Work Style Reforms to Vitalize Human Resources

Actual working hours in the construction industry are much greater than the average for all industries, so the reduction of long working hours is an urgent issue. To address this issue, Sumitomo Mitsui Construction is not only improving productivity but also formulating a program to reduce long working hours (Shorter Hours Program 2016-2018), developing systems for work-life balance, and aggressively working on changing employee awareness.

One reason for the long working hours in the construction industry is that the practice of giving on-site workers two days off per week is not well established. In fiscal 2016, we tried six-day closure<sup>1</sup> per four weeks and eight-day closure per four weeks at selected sites. We then verified the effects of the trial by conducting a survey of on-site workers regarding their opinions about closing the sites on Saturdays and how they spend their days off. As site closure significantly affects the income of on-site workers, we are cooperating with Shineikai, an organization representing our partners, and making persistent efforts based on the survey results to establish a standard of two days off per week in the field.

<sup>1</sup> Closure means to completely suspend work on the site.

**Shorter Hours Program 2016-2018**

**1. Objective**

By properly managing working hours, aggressively reducing long working hours, and shortening actual working hours, we improve the workplace and work environment in a way that allows us to ensure work-life balance, motivate employees to contribute to corporate performance, and cultivate a more creative workforce.

**2. Final targets in the Mid-term Management Plan 2016-2018**

(1) Reduce overtime/work on holidays to less than 720 hours/year (60 hours/month on average)  
(employees working in the office: 100%, employees working outside the office: 80% or higher)

(2) Six days off per four weeks for on-site workers (including rotation and days off in lieu)

(3) Taking leave for transfer between sites: 100%

## Initiatives to Raise Awareness of Human Rights and Address Harassment

For all employees, we provide education to raise awareness of human rights and assign at least one male and one female staff member to the Personnel Department at Head Office and the Administration Department at each branch. Additionally, from fiscal 2017, we launched a new online counseling tool, i-message, that employees can use on a casual basis. We also established external counseling contact points at a law firm and a specialized private-sector institution to handle reports and provide advice.

## Initiatives to Improve Fair Treatment

As part of activities to create an attractive corporate culture, we are steadfastly promoting measures to improve the working conditions of employees and build a well-modulated personnel system and structure.

### Fair Personnel Evaluation

We fairly evaluate the efforts and achievements of employees, and reflect the evaluation results in their treatment. Employees are evaluated as to their achievement of their targets set through employee-supervisor interviews, and get feedback on the evaluation results so that they can work toward higher targets. We aim to enhance internal communication through such feedback so that the company will become a more open organization. Also, in determining treatment, unlike in the past, when seniority was the sole consideration, we now value ability and results to ensure that motivation is enhanced and that evaluation is fair and equitable.

### Implementing Self-Reporting System

Each year, we collect information from individual employees on what they desire in terms of their current or future duties and workplace and their career development, and use the information to ensure personnel are assigned and promoted to appropriate positions.

### Employee Classification Change System

We have put in place a system that allows employees who satisfy certain requirements to change their classification, for instance, from major career path (place of work can be anywhere across Japan) to major career path (place of work is limited to a region) or vice versa, or from minor career path to major career path (place of work can be anywhere across Japan or is limited to a region).

In fiscal 2016, we reviewed the system and eased the requirements (raised the upper age limit and added eligibility requirements), and promoted the proactive use of the system.

### President's Award

Every year, to improve employee morale we recognize employees who have conducted excellent activities in light of the objectives of the Corporate Principles in the areas of construction, sales, design, technology and the environment. These employees are presented with a President's Award at an award ceremony.

## Focus on the Field

### Reducing Overtime by Reducing Workloads and Changing Employees' Awareness

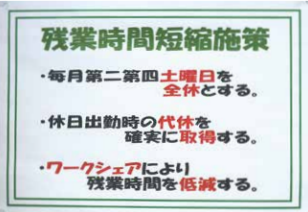
Currently, employee overtime amounts to around 40 to 50 hours per month on average, although some employees have greater workloads. To prevent imbalance, we are taking measures, including adopting a rotating schedule for attendance at the daily morning session that starts at 6:30 am and reducing the number of attendees at the afternoon meeting.

To achieve the overtime target of 60 hours or less, taking a day off is essential. To that end, we need to establish rules that require an employee who has worked on the weekend to take days off in lieu during the week, and coordinate on-site operations in a planned manner. We assign specialized support staff to perform the time-consuming task of creating safety, quality and environmental documentation so that our project members can use their time more effectively.

However, it does not make sense to work in an unfocused manner just because you have a lighter workload. Therefore, we created an environment to encourage individual employees to change their mindset by requiring them to visualize the time they expect to finish their job by writing it on a whiteboard. Under the project manager policy, which recognizes that "nothing will change unless action is taken," we are aggressively taking specific actions to shorten working hours.



**Yoshihiro Kakumaru**  
Project Manager  
Shin-Tomei Tanigayama Tunnel West Project  
Tokyo Civil Engineering Branch



Measures to shorten working hours, posted on the wall

### Examining Operations to Propose Effective Measures to Shorten Working Hours

The contract for our project limits the working hours to between 8:30 to 18:00 and requires the site to be closed on Saturdays, Sundays and holidays. To achieve delivery within the designated construction period while closing the site down on weekends and holidays, we considered measures for improving the efficiency of skeleton work and increasing manpower for construction labor even from the planning phase and were able to complete the project successfully. However, the need to perform construction work in a very intensive manner placed heavy workloads on on-site personnel, who still had many tasks, such as supervising, coordinating separate jobs and dealing with neighbors.

For the reduction of working hours, it is crucial to understand and examine on-site staff operations in detail. Based on this, we must take improvement measures, such as reducing absolute workloads or eliminating tasks that are not strictly necessary. In our project, we used a system for viewing and creating documents with mobile tools, which enabled us to perform administrative tasks, including automatically organizing construction photographs and reports and sharing emails and issues related to the adjustment of construction processes, while in the field. We would now like to examine operations to expand the scope of the use of tools and propose ideas for reducing on-site working hours.



**Hisanori Kurokawa**  
Project Manager  
Kamiosaki 3-chome Project  
Tokyo Building Construction Branch



Inspecting reinforcement placement using a tablet computer



Secure, Cultivate and Vitalize Human Resources

Securing and Cultivating Human Resources

Human Resource Development Based on a New Education System

With the aim of creating an attractive corporate culture that motivates employees to work hard, we provide training and education programs based on a new educational system to support the growth of individual employees. The system was developed in light of current and future needs regarding human resources.

Education Programs

- [Education by job grade] new employee training, new employee follow-up training (new program), leader training, middle management training, senior management training
- [Special education] management training for selected employees, study in Japan, study abroad, short-term study abroad, etc.
- [Education by job classification] specialized education by division/department (civil engineering, building construction, design, technological development, international, sales, administration)
- [General education] for all employees, compliance education, education on the Charter of Corporate Conduct, management system education, safety and health education, IT education, human rights education, diversity education, training for mid-career employees (new program), harassment prevention training, mental health training, etc.
- [Other] support for acquisition of qualifications

Cultivating Global Human Resources

To cultivate, secure and retain locally hired employees outside Japan, we established the Human Resource Development Center (HDC) in the Philippines in July 2016. The HDC provides education for local employees who work at locations outside Japan to support our overseas business. We will develop a personnel system that enables local employees to work globally. We are also stepping up our efforts to cultivate global human resources, including providing programs for study abroad (at companies or at universities) and short-term study abroad (language training and internship), as well as opportunities to work overseas on a rotating basis.



Build Programs That Trainees Can Master

In the two years following the review of the employee education structure in September 2015, we have gradually started to see some changes. And we have received feedback from those who took training courses. One trainee was told enviously by his boss, "You are lucky to have training programs that were not available to us." Another told us that he was looking forward to taking the course as he heard from a previous year's trainee that "the program was interesting." In fiscal 2016, for the first time, we provided mid-career employee training. In this program, 40 employees who joined the company between April 2015 and December 2016 learned about the history of the Mitsui Group and the Sumitomo Group and the business of our company, and discussed the value that Sumitomo Mitsui Construction is providing. The training course seems to have motivated the participants as they commented that they were "proud to work for the company."



Kachiko Komagamine  
Personnel Department

Pass on Skills

Cultivating Partners

In the construction industry, workers are aging while the number of young people entering the industry is decreasing. Securing and cultivating human resources and passing on skills are pressing issues. As an initiative to retain workers in the construction industry, we cooperated with the Tokyo Civil Engineering Branch Shineikai and the Tokyo Building Construction Branch Shineikai to provide an opportunity for high school students to visit construction sites and undertake work experience. In 2011, we established the Construction Meister system to further enhance our partnership with the Shineikais and facilitate the retention of excellent human resources. From among those foremen employed by our partners and working on our construction projects, the system allows us to identify excellent candidates based on their achievements, contribution, cooperative ability and personal attitudes and certify them as "meisters." Once certified, the foremen are able to receive qualification allowances when working on our projects. Meanwhile, to establish the SMCC brand with regard to bridge construction as one of our key business areas, we certify foremen with outstanding skills in overall execution and leadership as "Bridge Meisters." Certified foremen are expected to train young technicians who will lead the PC industry in the future and to pass on their skills to the next generation.



Providing high school students with work experience



Bridge Meister accreditation ceremony

Initiatives for Diversity

Promotion Framework

In December 2014, we established the Diversity Committee and its sub-organization, the Female Empowerment Working Group. Having a strong corporate commitment and making efforts to change employees' awareness, we are proactively promoting women, foreign nationals, senior employees and employees with disabilities and developing a corporate culture that allows a diverse range of people to make active contributions.

■ Employment status (unconsolidated; as of March 31, 2017)

	No. of employees (persons)	Average age (years old)	Length of service (years)
Overall	2,617	46.57	22.06
Male	2,349	47.33	22.73
Female	268	39.71	16.02

Developing Systems for Diverse Work Styles

In response to the needs of individual employees with diverse values, we will enhance systems to provide them with workplace environments that allow them to balance their work and personal life and continue to work in a healthy and secure manner, and will distribute the Work-Life Balance Handbook covering issues related to child-rearing and caring for family members.

Diverse Work Styles and Programs for Different Lifestyles

- <New programs>
  - Satellite office program
  - Shorter hours/limited days program (for employees who are rehired after reaching the retirement age)
- <Revised program>
  - Childcare and family care leave system



Work-Life Balance Handbook

Promoting the Employment of Older Workers

In response to the Act on Stabilization of Employment of Elderly Persons, we established a continued employment program for employees who have reached the age of retirement (60 years old). In fiscal 2016, 57 employees out of 63 who reached the retirement age used the system and are now working in frontline positions.

Example of Initiatives for Female Empowerment

Kensetsu Komachi

For female empowerment in the construction industry, the Japan Federation of Construction Contractors (JFCC) established Kensetsu Komachi, named after the nickname for women working in the industry, to launch various activities. In support of the initiative, Sumitomo Mitsui Construction has formed Kensetsu Komachi Construction Teams<sup>1</sup> at 12 sites (as of the end of March 2017) and designated these sites as areas where Kensetsu Komachi can play an active role. At the first Shizuoka Construction Festival held in November 2016, three female civil engineers from our company talked about the kinds of work women perform in the construction industry as part of the Kensetsu Komachi Panel Discussion. The JFCC and the City of Shizuoka both recognized their activity.

1 A registration system established by the JFCC to publicize construction sites where women are making active contributions



Kensetsu Komachi Panel Discussion

Employment of People with Disabilities

As of the end of March 2017, we satisfy the statutory rate of 2.0% with regard to the employment of people with disabilities. In light of the purpose of the laws and regulations, we will make continued efforts to proactively employ disabled workers.

Systematic Recruitment of Foreign Nationals

To be an organization with a diverse workforce made up of individuals playing active roles, we systematically hire foreign students studying in Japan as part of our regular recruitment process. These recruits are actively working as engineers in and outside Japan.

Promoting Female Empowerment

In April 2016, we developed a three-year action plan based on the Female Empowerment Promotion Act. After a year, the number of female managers increased from 12 to 18, while six female employees were promoted from the minor career path to the major career path under the employee classification change system. We will make continued efforts to achieve the targets. Our efforts to proactively promote female empowerment also include introduction of a new training program for female empowerment and launch of Aozora Komachi activities in and outside the company by female employees.



A female employee giving a lecture at a university (Aozora Komachi activity)



Training course for female employees

Newly Introduced Training Programs

Career training and business training for female employees (minor career path)

General Employer Action Plan based on the Female Empowerment Promotion Act

- Period of the plan: 3 years from April 1, 2016 to March 31, 2019
- Target 1: Ensure that female employees on the major career track account for 20% or more of all new employees.  
Double the number of female employees engaged in technical work, compared with the April 2014 figure.
- Target 2: Reduce average overtime by 15%.
- Target 3: Double the number of female managers to 24 from today's 12.



## Build a Multilayered Earnings Base

# We Flexibly Evolve Our Business Portfolio According to Changes in the Business Environment to Build a Multilayered Earnings Base

## Build a Multilayered Earnings Base

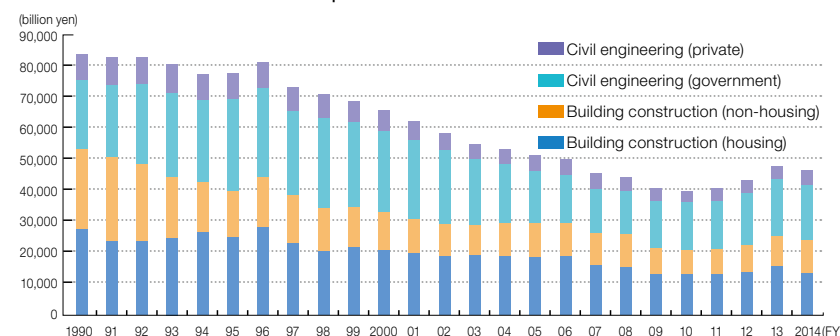
- (1) Drastically reinforce overseas business
- (2) Create new sources of earnings with PPP/PFI, concession projects, etc.
- (3) Operate business in the areas of the environment and infrastructure maintenance



## Social Issues

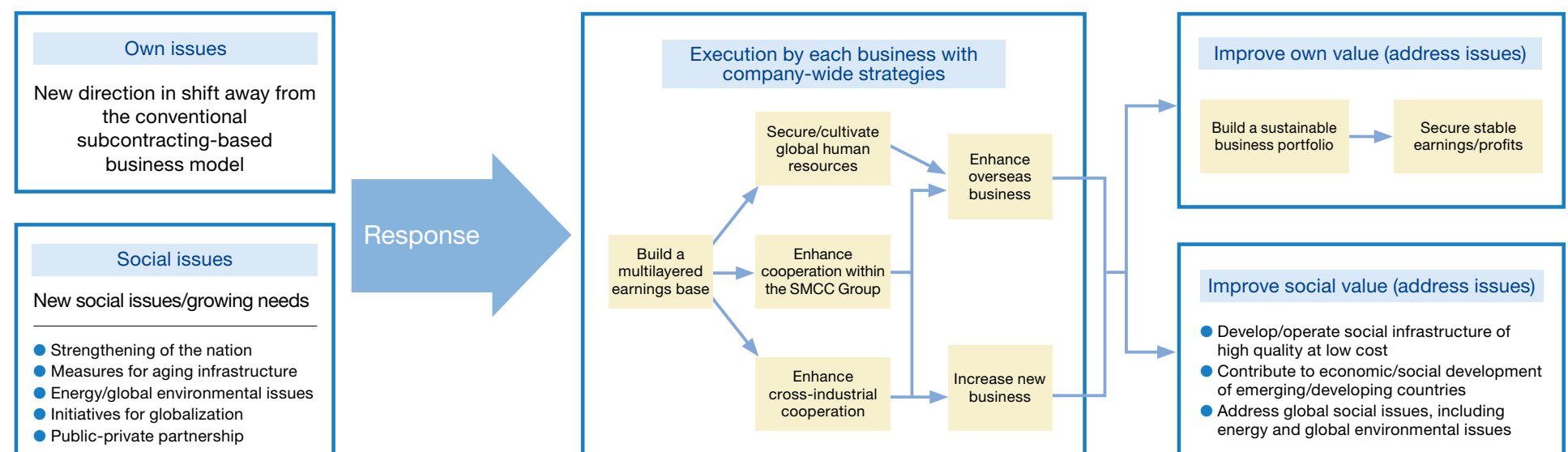
The environment of the construction market in Japan is becoming increasingly challenging, with a drop in demand due to the declining population and shrinking public investment due to financial constraints over the mid to long term. Meanwhile, investment in overseas markets, particularly Southeast Asia and India, as well as investment in construction, including infrastructure development and urban development, in new energy and renewable energy markets, is expected to increase. However, such markets require more considered examination than ever in terms of verifying the safety, quality and business risks associated with the creation of new business opportunities.

### Construction investment in Japan



Source: MLIT, Fiscal 2017 Construction Investment Outlook, Table 4 Construction Investment (Real value: Fiscal 2005 benchmark)

## Sumitomo Mitsui Construction's Value Creation Stories





Build a Multilayered Earnings Base

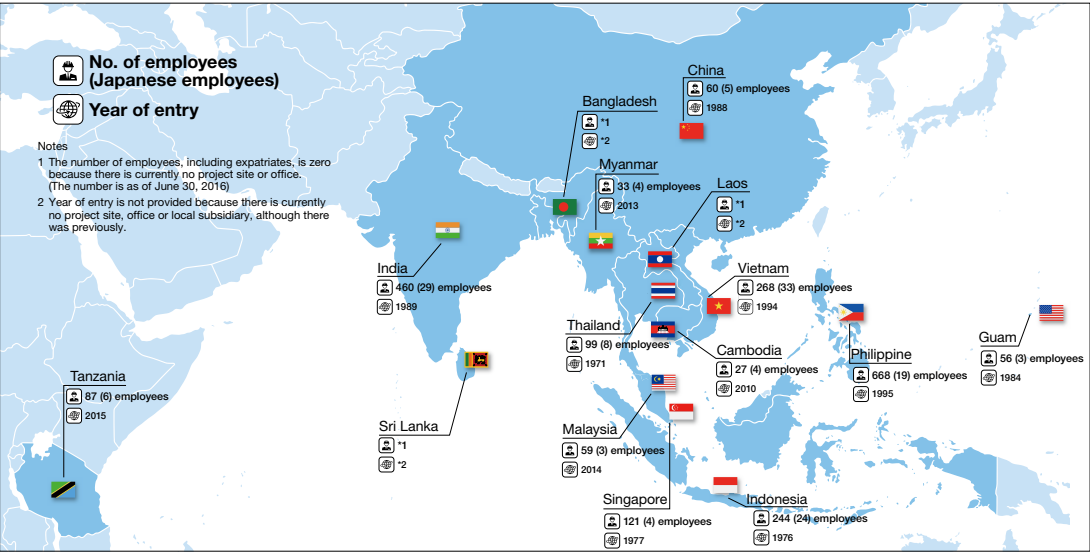
Initiatives in Overseas Business

Positioning overseas business as its third pillar—after domestic civil engineering and building construction—Sumitomo Mitsui Construction works on construction projects centering on official development assistance (ODA) projects and projects undertaken by Japanese companies, particularly in Asian countries to the east of India. Currently, we operate eight local subsidiaries in 12 countries and aim to build a system that generates stable earnings.

Overseas Business Growing to Be a Major Pillar

In environments that are sometimes challenging due to differences in language, culture and religion, we put together teams, build the necessary organizations, and develop on-site environments that are most appropriate for the local situation in order to deliver contracted projects to customers by the deadline promised. To provide workplace environments where diverse teams can work together in a dynamic fashion, the Mid-term Management Plan focuses on the improvement of local education and working conditions. In addition to cooperation with local companies, we enhance internal control and promote localization and globalization to expand each line of business. In light of the greater social advancement of women outside Japan, we are also stepping up our efforts to provide an environment that allows female employees

to play active roles, whether in administration or engineering. Our major ODA projects involve the development of infrastructure, including roads, bridges, schools and hospitals, in developing countries. As we transfer our construction technologies to local communities to support their economic development, we contribute to the development of the local economy. Meanwhile, we provide powerful support for Japanese companies entering overseas markets by taking advantage of the local networks, wealth of information and expertise we have already built up. We provide this support at various phases, including during the companies' entry into the market and while they are building their offices. The Tokyo International Conference on African Development was held in August 2016, and we have started working in the United Republic of Tanzania on a project basis. We will continue to operate business in Southeast Asia, South Asia and Africa for steady growth.



Initiatives in New Business

In light of social movements around the world, we are operating a problem-solving new business that may improve the soundness, safety and sustainability of civilian life.

Taking orders on a per-project basis in principle, the construction industry builds infrastructure that support economic development in and outside Japan. Business has therefore been greatly affected by changes in economic conditions. The current market environment is favorable, but some think that the business environment will once again become challenging if the economy slows down in the future. With the current favorable market environment, we now need to develop a sustainable portfolio and make strategic efforts to secure stable earnings and profits in the mid to long term. The role of construction companies in society is changing from development and improvement of economic and social infrastructure to renovation and maintenance of economic and living environments. Sumitomo Mitsui Construction aims

to build a multilayered earnings base to establish a robust management foundation by creating new sources of earnings in industries surrounding the construction industry or in “stock-type” downstream business in addition to our conventional contracting business. To that end, it is crucial that we create unprecedented products and new services for addressing customers' issues in response to changes in and diversification of the social environment and customer needs. We promote projects in such areas as renewable energy, PPP/PFI, mid- to large-scale wooden buildings and engineering services to build a multilayered earnings structure that will allow us to secure stable earnings and profits.

Renewable energy

Solar power generation

Sales of floating solar power generation system

Mid- to large-scale wooden buildings

Wooden convenience store (Ebina City, Kanagawa Prefecture)

PPP/PFI

PPP/PFI project for the improvement of Kawanishi City Gymnasium

Employee Talks about Specific Case

Jakarta MRT106 Construction Project

The project is a Japanese ODA project to construct Indonesia's first subway system in Jakarta City. We are in charge of the design and construction of two station buildings and connecting tunnels for a segment measuring around 2 km. As of July 2017, we have completed the construction of the station buildings and started to work on ancillary buildings and facilities. We also completed the excavation of two tunnels for inbound and outbound lines in February 2017, for which we used the mud pressure shielding method and two shield machines. We succeeded in accurately excavating the tunnels using shielding machines as we meticulously provided local staff with guidance and training on the measurement technique. When we safely completed the excavation, we were overjoyed by the sense of accomplishment. It is expected that the subway system, when completed, will not only ease traffic congestion on major roadways and improve convenience but will also greatly contribute to a better urban environment through reduced exhaust gas emissions and noise. We will continue to work hard to complete the project with a “safety first” approach.



Jakarta MRT106 project members

Employee Talks about Specific Case

Case of One-Stop Solution Service

When our customers relocate their R&D facilities, they have enormous workloads, including coordinating with numerous parties and managing the relocation work. To improve operational efficiency and reduce the workloads of our customers, we take care of all relocation-related tasks, proposing a relocation plan developed from the perspective of the researchers themselves and providing a one-stop service covering coordination with different equipment manufacturers, transportation, installation and adjustment of equipment, and calibration for traceability. We will continue to address the diversifying needs of customers and offer optimal solutions.



Shuji Senna  
Department Manager  
Business Engineering  
Department  
Business Innovation &  
Incubation Division



# Progress of the Mid-term Management Plan 2016-2018

## Numerical Plan (consolidated)

	Fiscal 2016		Fiscal 2018
Sales	403.9 billion yen	➡	440.0 billion-yen level
Operating profit on sales	6.9%	➡	5% or higher
Capital-to-asset ratio	18.8%	➡	20% or higher
Dividend payout ratio	14.3%	➡	20% or higher

## Fiscal 2016 Overview

Performance in fiscal 2016, the first year of the Mid-term Management Plan 2016-2018, was as follows:

Consolidated sales steadily improved due to the favorable market environment throughout the entire construction industry. Compared with the previous year, however, when we undertook a series of large-scale construction projects, the value of completed work decreased by 11.1 billion yen to 403.9 billion yen.

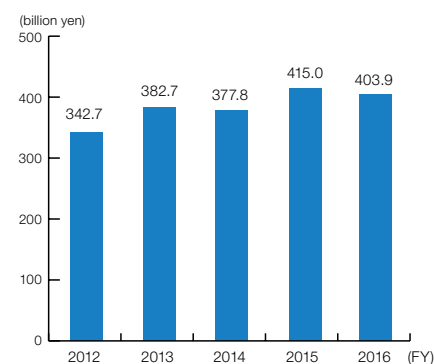
Profits remained at a generally stable level despite fluctuations in the cost of labor and materials. The civil engineering business continued to maintain a high level of profits. The building construction business significantly improved its profitability due to its efforts for production efficiency improvement and cost reduction. The overall gross profit margin of completed work improved considerably.

Consequently, we have marked record high earnings for the second consecutive year since the merger, with operating income of 27.9 billion yen (up 4.5 billion yen from the previous year) and ordinary income of 26.2 billion yen (up 4.4 billion yen from the previous year). Profit attributable to owners of the parent was 17.0 billion yen (up 7.1 billion yen from the previous year).

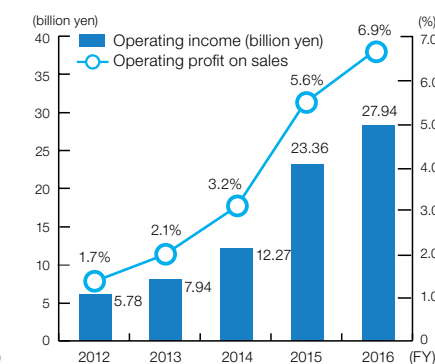
In the performance outlook for fiscal 2017, which we announced in May 2017, we expect consolidated sales of 427.0 billion yen, operating income of 21.6 billion yen, ordinary income of 19.7 billion yen, and profit attributable to owners of the parent of 14.0 billion yen.

## Performance (consolidated)

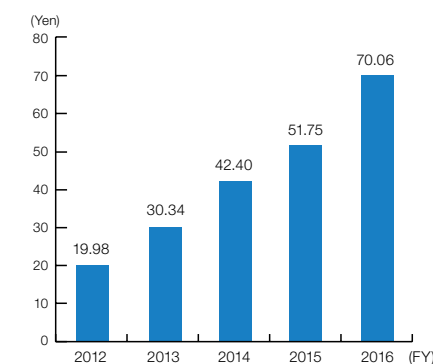
### Sales



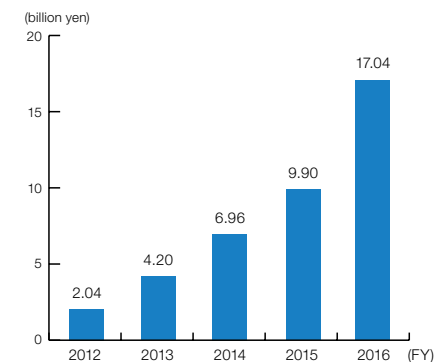
### Operating income/operating profit on sales



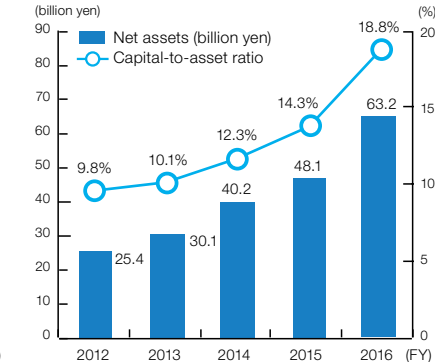
### Net assets per share



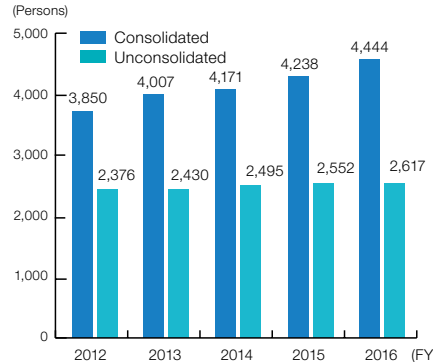
### Net income



### Net assets/capital-to-asset ratio



### Number of employees



# Financial & Non-financial Highlights

## Financial data (consolidated)

	(million yen)				
	FY2012	FY2013	FY2014	FY2015	FY2016
<b>Operating performance</b>					
Orders received (unconsolidated)	290,605	302,131	356,144	351,997	330,555
Sales	342,727	382,724	377,825	414,958	403,908
Operating income	5,784	7,944	12,265	23,364	27,941
Ordinary income	4,612	7,989	11,998	21,801	26,174
Net income	2,042	4,201	6,955	9,902	17,035
Earnings per share (yen)	4.56	5.51	8.59	12.18	20.96
Return on equity (%)	10.0	17.9	23.2	25.9	34.4
Price earnings ratio (-fold)	16.7	19.6	19.3	8.3	5.8
Operating profit on sales (%)	1.7	2.1	3.2	5.6	6.9
<b>Financial standing</b>					
Total assets	221,416	250,716	279,450	293,663	302,152
Net assets	25,361	30,074	40,190	48,136	63,242
Capital-to-asset ratio (%)	9.8	10.1	12.3	14.3	18.8
Net assets per share (yen)	19.98	30.34	42.40	51.75	70.06
Dividend per share (yen)	—	—	1.0	2.0	3.0
<b>Cash flow</b>					
Operating cash flow	16,553	-6,575	14,527	10,742	-3,882
Investment cash flow	-3,571	-266	-6,628	805	-1,648
Financial cash flow	-12,563	5,400	3,053	2,168	7,792



**JPX-NIKKEI 400**  
Selected for FY2015-2017

Sumitomo Mitsui Construction is selected for inclusion in the "JPX Nikkei Index 400."

## Non-financial data (unconsolidated)

	FY2012	FY2013	FY2014	FY2015	FY2016
No. of employees (consolidated)	3,850	4,007	4,171	4,238	4,444
No. of employees (unconsolidated)	2,376	2,430	2,495	2,552	2,617
Male	2,190	2,240	2,285	2,312	2,349
Female	186	190	210	240	268
Average age of employees (years old)	45.2	46.0	46.2	46.5	46.5
Average length of service of employees (years)	21.8	22.4	22.2	22.2	22.0
R&D cost (million yen)	885	975	1,118	1,380	1,657
Frequency of safety incidents	0.69	0.96	0.48	0.71	0.59
Unit of CO <sub>2</sub> emissions (t-CO <sub>2</sub> /100 million yen)	25.4	21.6	23.7	24.4	23.6
Construction waste discharged (1,000 tons)	680	429	500	620	596

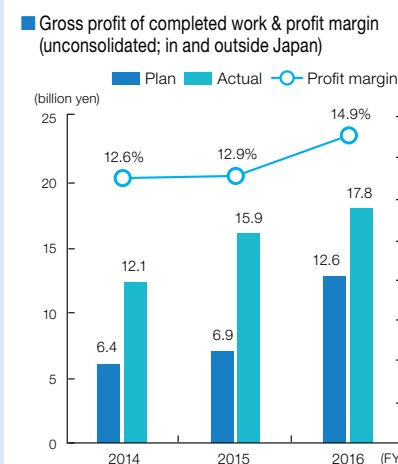
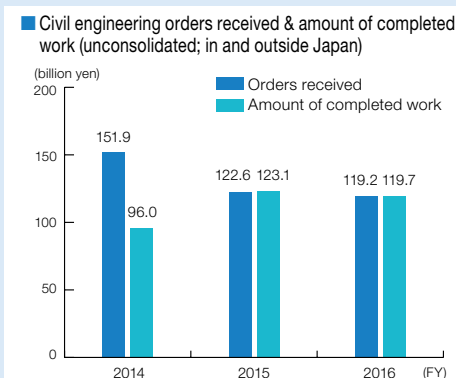
# Fiscal 2016 Business Overview by Division

## Domestic Civil Engineering



Performance in fiscal year ending March 31, 2017

Orders received remained at the level of the previous year, surpassing the 100 billion yen planned at the beginning of the fiscal year, due to an increase in orders for governmental projects despite a year-on-year decrease in orders for private-sector projects. Sales remained unchanged from the previous year, but the high profit level improved even further to 14.9%, up 2.0% year-on-year, due to improvement in the profitability of a large-scale project with a design change.

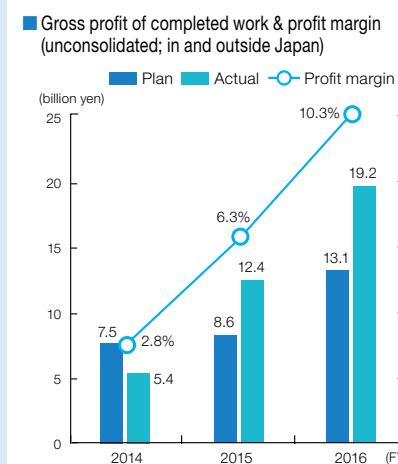
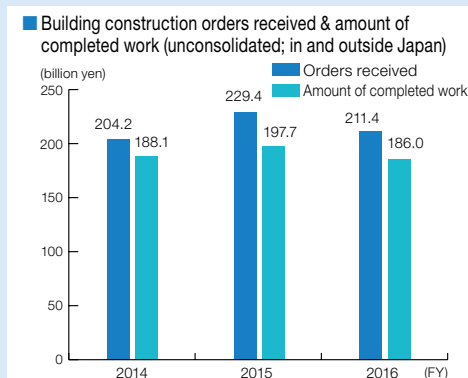


## Domestic Building Construction



Performance in fiscal year ending March 31, 2017

Orders received surpassed the 200 billion yen planned at the beginning of the fiscal year, albeit declining from the previous year, amid a solid business environment, particularly in the private sector. Sales fell slightly below the previous year's results, but the profit margin improved significantly to 10.3%, up 4.0% year-on-year, achieving a substantial increase in profit.

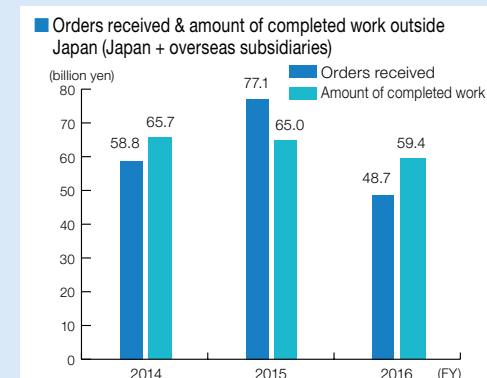


## Overseas Business

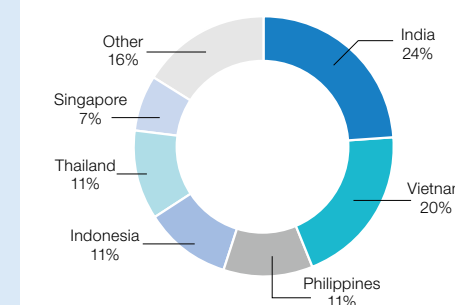


Performance in fiscal year ending March 31, 2017

Orders received in Japan and by overseas subsidiaries for overseas business decreased year-on-year to 48.7 billion yen due to the high base in the previous year driven by an order for a large-scale project as well as to the timing of the placement of an order for another large-scale project, which differed from the expected timing. Looking by country, orders received in Vietnam, where we received an order for Vietnam's first urban railway construction project, and those in India, where we received an order for a Japanese carmaker's automotive plant, were comparatively buoyant.



■ Orders received outside Japan (Japan + overseas subsidiaries) by country (3-year total)



## Business Innovation & Incubation



Performance in fiscal year ending March 31, 2017

In the area of renewable energy, our solar power business operated on the premises of our Mitagawa PC Plant (Saga Prefecture) sold 1,157,000 kWh of electricity in fiscal 2016. In regard to floating solar, we participated in a trial for a floating solar power generation system led by the Government of Singapore, with a view to aggressively operating the business outside Japan.

In the area of PPP/PFI, we participated in a PFI project for the improvement of the Kawanishi City Gymnasium, and completed improvement works for a set of facilities.

As part of our initiatives for mid- to large-scale wooden buildings, we received an order for a wooden convenience store in the Greater Tokyo area.





# Governance, Social and Environmental (GSE) Activity Report

Aiming to be a sound, earth-friendly and socially creditable corporate citizen, Sumitomo Mitsui Construction promotes corporate governance, social activities and environmental management.

■ Major activities and results in fiscal 2016 and targets of activities in fiscal 2017

ISO core subject	Major activity	FY2016 activity target	FY2016 activity result	Self-evaluation	FY2017 activity target	Page	
Governance	Improve the governance system <sup>1</sup>	● Improve/operate a governance system compliant with the Corporate Governance Code.	• Increased the number of independent external directors from 1 to 2 to enhance the Board of Directors' decision-making and supervisory functions. • Continued evaluation of the effectiveness of the Board of Directors and confirmation/evaluation of cross-shareholdings. • Conducted advance discussion on executive appointment and examination of the remuneration system by the Appointment and Remuneration Advisory Committee. • Held results briefings for analysts twice/year (year-end and interim).	○	● Improve/operate a governance system compliant with the Corporate Governance Code.	45-46	
		● Maintain/improve the business continuity plan (BCP).	• Conducted examination as to maintenance/improvement of BCP's viability by a cross-sectoral working group. • Conducted a case-study-based BCP drill at Head Office (including the Osaka Branch as a backup office) using the scenario of a large earthquake.	○	● Maintain/improve the business continuity plan (BCP).	49	
	Operate/improve the internal control system, raise compliance awareness	● Achieve zero major information security incidents.	• There were zero major information security incidents. • Improved information security awareness by conducting a targeted attack drill using a simulated e-mail.	○	● Achieve zero major information security incidents.	48	
		● Achieve zero major compliance violation incidents.	• An affiliate was ordered to suspend its business with a final court ruling on a violation of the Antimonopoly Act.	△	● Achieve zero major compliance violation incidents.	49	
		● Provide education based on the annual plan for compliance education.	• Provided compliance education 100% according to the annual plan.	○	● Provide education based on the annual plan for compliance education.	47	
		● Ensure implementation of measures to prevent violations of the Construction Business Act. • Provide education on the Construction Business Act as specified in the annual plan. • Conduct the "Construction Business Act Patrol" according to the annual plan.	• Covered the Construction Business Act in the annual plan for compliance education, and provided education on the act. • Conducted patrol regarding compliance with the Construction Business Act according to the annual plan.	○	● Ensure compliance with the Construction Business Act and other related laws and regulations. • Provide education on the Construction Business Act as specified in the annual plan. • Check compliance with the Construction Business Act by conducting the "Construction Business Act Patrol" according to the annual plan, and provide guidance/correction.		
		● Provide education on the Antimonopoly Act as specified in the annual plan. ● Collect written pledges of legal compliance to eliminate bid-rigging. ● Improve/operate programs to eliminate bid-rigging at affiliates.	• Covered the Antimonopoly Act in the annual plan for compliance education, and provided education on the act. • Collected written pledges of legal compliance, including elimination of bid-rigging, from all officers and employees. • Developed bid-rigging elimination programs and provided education for awareness raising at six affiliates engaged in execution with a construction business license.	○	● Provide education on the Antimonopoly Act as specified in the annual plan. ● Collect written pledges of legal compliance to eliminate bid-rigging. ● Properly operate programs to eliminate bid-rigging at affiliates.		
	Consumer issues	Provide safe, secure, high-quality construction works	● Control quality in the execution phase. • Conduct quality patrol regarding priority management projects, etc.	• Conducted quality patrol based on the plan.	○	● Control quality in the execution phase. • Conduct quality patrol regarding important projects based on the plan.	25-26
			● Control quality in the execution phase. • Conduct on-site quality audits twice per site. • Ensure that quality safety auditors (QSAs) witness items specified in the Guidelines for the Management of Precast Concrete Piling.	• Started operation of quality audit according to the yearly quality audit plan. • Conducted a precast concrete piling test with a quality safety auditor (QSA) witnessing, and conducted a quality audit on other major quality control items according to the production control plan.	◎	● Control quality in the execution phase. • Conduct on-site quality audits twice per site. • Ensure that quality safety auditors (QSAs) check compliance with the execution processes regarding major quality control items (in building construction). • Check the progress of patrol by quality safety inspectors (QSIIs) (in civil engineering).	
● Promote technologies for quality improvement.			• Promoted/spread technological development themes for quality improvement, including a case of achieving the high-quality rapid construction of distribution facilities with large space by developing/applying the SQRIM PC method; and a case of improving position accuracy of facility pipe installation by developing pipework sleeve management system using the SLAM technology.	◎	● Promote technologies for quality improvement.	24	
Social	Human rights, labor practices	Ensure safety and health management	● Eliminate accidents. Targets: Frequency rate of 0.6 or less Severity rate of 0.02 or less	• Frequency rate: 0.59; severity rate: 0.18	△	● Eliminate accidents. Targets: Frequency rate of 0.6 or less; severity rate of 0.02 or less	27
		Raise human rights awareness	● Provide human rights education.	• Provided human rights education during new employee training • Provide workplace harassment education for all employees through e-learning.	◎	● Provide human rights education.	31
		Promote diversity	● Secure employment of people with disabilities at the statutory rate or higher. Targets: Employment of people with disabilities at the statutory rate of 2.0% or higher	• Achieved the statutory employment rate of people with disabilities.	◎	● Secure employment of people with disabilities at the statutory rate or higher. Targets: Employment of people with disabilities at the statutory rate of 2.0% or higher	34
			● Reemploy employees who desire to continue working after reaching the age of retirement until they turn 65. Targets: Reemployment rate of 85% or higher	• Reemployment rate: 90%.	◎	● Reemploy employees who desire to continue working after reaching the age of retirement until they turn 65. Targets: Reemployment rate of 85% or higher	
			● Improve the personnel system for diverse work styles.	• Examined a shorter hours/limited days programs for non-regular (senior) employees. • Examined a satellite office program for those who have difficulty commuting to their place of work due to childcare/family care. • Revised the childcare and family care leave system.	◎	● Improve the personnel system for diverse work styles.	
			Promote shorter hours.				
			• Increase use of leave entitlements regarding leave for transfer between sites. Targets: Use of leave entitlements at 80% or higher among all eligible employees	• Use of leave entitlements: 72.4% (3.6 days on average)	△	◆ Targets by the end of fiscal 2018 based on the Shorter Hours Program 2016-2018 (1) Reduce overtime/work on holidays to less than 720 hours/year (60 hours/month on average) (employees working in the office: 100%; employees working outside the office: 80% or higher) (2) Six days off per four weeks for on-site workers (including rotation and days off in lieu) (3) Taking leave for transfer between sites: 100% • Fiscal 2017 initiatives Targets: Overtime/work on holidays employees working in the office: less than 720 hours/year (60 hours/month on average); employees working outside the office: less than 840 hours/year (70 hours/month on average)	31
			• Increase use of refreshment leave entitlements. Targets: Use of leave entitlements at 15% or higher	• Use of leave entitlements: 4.0%	△		
		• Increase use of paid leave entitlements. Targets: Use of leave entitlements at 40% or higher	• Use of leave entitlements: 36.3%	△			
			• Reduce overtime. Targets: 15% reduction of average overtime, compared with 2015, by March 2019	• 7.7% reduction in fiscal 2016	-	• Reduce overtime. Targets: 15% reduction of average overtime, compared with 2015, by March 2019	34

Self-evaluation: ◎ Achieved the target and efforts were sufficient; ○ Achieved the target; △ Failed to achieve the target or efforts were insufficient

	ISO core subject	Major activity	FY2016 activity target	FY2016 activity result	Self-evaluation	FY2017 activity target	Page
Social	Human rights, labor practices	Promote female empowerment.	Promote female empowerment.				
			• Increase the percentage of female employees. Targets: Ensure that female employees on major career track account for 20% or higher of all new employees. Targets: Double the number of female employees engaged in technical work, compared with the April 2014 figure, by March 2019 (from 41 to 82).	• Percentage of female employees on major career track among all new employees: 17.1% • Number of female employees engaged in technical work as of March 31, 2017: 1.7 times greater (69 persons)	△	• Increase the percentage of female employees. Targets: Ensure that female employees on major career track account for 20% or higher of all new employees. Targets: Double the number of female employees engaged in technical work, compared with the April 2014 figure, by March 2019 (from 41 to 82).	34
			• Increase the number of female managers. Targets: Double the number of female managers, compared with the April 2016 figure, by March 2019 (from 12 to 24).	• As of March 31, 2017: 1.5 times greater (18 persons)	—	• Increase the number of female managers. Targets: Double the number of female managers, compared with the April 2016 figure, by March 2019 (from 12 to 24).	
			• Provide diversity education.	• Provided training for managers who have female subordinates. • Provided career training and business training for female employees.	◎	• Provide diversity education.	
		Cultivate human resources (human assets)	● Provide education by job grade and classification.	• Provided education by job grade 100% based on the yearly plan.	◎	● Provide education by job grade and classification.	33
			● Cultivate/retain local core employees outside Japan.	• Established the Human Resource Development Center (HDC) in the Philippines. • Examined a new personnel system for local core employees outside Japan. • Provided professional education by job classification for local employees at HDC (127 participants).a	◎	● Cultivate/retain local core employees outside Japan.	
			● Cultivate partners.	• Improved motivation by operating meister systems. • Improved the safety/quality/execution level by holding presentations on improvements. • Held site tours, organized by partners, for high school students.	○	● Cultivate partners.	28, 33
	Community involvement and development	Build good relationships with local communities	● Participate in volunteer activities.	• Tree-planting volunteer activity in the Philippines. • Participated in local cleanups or other volunteer activities.	○	● Participate in volunteer activities.	56
			● Participate in education programs. Targets: Hold a tour at the Technical Research Institute. Targets: Host students who wish to undertake work experience.	• Held a tour at the Technical Research Institute: once • Hosted students who wish to undertake work experience: once	○	● Participate in education programs. Targets: Hold a tour at the Technical Research Institute. Targets: Host students who wish to undertake work experience.	—
Environmental	The environment <sup>2</sup>	Enhance environmental knowledge	● Provide environmental education through e-learning/group education.	• Provided e-learning education for all employees: twice • Provided group education: 11 times • Provided education for branch-level environmental staff: twice	○	● Provide environmental education through e-learning/group education.	55
		Raise environmental awareness	● Raise awareness by holding internal environmental events.	• Granted a President's Award (environmental category). • Held the Green Curtain Campaign and a photo contest. • Held a seminar for Eco Test preparation.	○	● Raise awareness by holding internal environmental events.	
			● Build a system to promote environmental activities at affiliates. ● Spread environmental activities to affiliates.	• Environmental staff meeting: twice; environmental education: once • Launched the Green Curtain Campaign.	○	● Build a system to promote environmental activities at affiliates. ● Spread environmental activities to affiliates.	
		Enhance environmental communication	● Participate in external environmental events. ● Hold external events.	• Participated in the Ministry of the Environment's Light-Down Campaign. • Entered the municipal Green Curtain Campaign and photo contest (Tokyo's Itabashi City awarded the Grand Prize in the organization category to our entry on on-site efforts.) • Family wild bird watching tour, rare frog species conservation • Gave public lectures at Head Office (on "local disaster prevention and energy" and other themes related to disaster mitigation).	○	● Participate in external environmental events. ● Hold external events.	55-56
		Provide solutions for reducing environmental impacts	● Provide solutions for reducing environmental impact at production facilities, etc.: 3 cases	• Received 3 orders for energy-saving projects (roof sprinkler system, etc.) at production facilities.	○	● Receive orders for works or operations that contribute to energy saving and improving the building construction environment: 4 cases	—
		Use renewable energy	● Expand floating solar power generation business. ● Operate existing solar power generation plant. ● Commercialize a new solar power generation plant.	• Sold floating solar power generation systems (3 cases: 3.3 MW). • Operated the existing proprietary solar power generation plant (1 case; annual energy production of 1.27 million kWh). • Commercialized a proprietary floating solar power generation plant (1 case).	○	● Expand floating solar power generation business. ● Stably operate existing solar power generation plant. ● Start operation of a new floating solar power generation plant.	38
		Reduce environmental impacts with technology	● Develop technologies for reducing environmental impact. Targets: 90% or higher rate of progress for ongoing themes	• Average progress of technological development themes for reducing environmental impact: 98% Including a case of developing technology for zero energy building (ZEB).	◎	● Develop technologies for reducing environmental impact.	—
		Reduce environmental impacts in the design phase	● 1.4% or higher built environment efficiency (BEE) for new houses with a floor area of 5,000 m <sup>2</sup> or larger	• Average BEE of 9 cases: 1.80	◎	● 1.45% or higher built environment efficiency (BEE) for new houses with a floor area of 5,000 m <sup>2</sup> or larger	—
		Reduce environmental impacts in the execution phase	● Reduce CO <sub>2</sub> emissions from the execution phase. Targets: 23.6 ton-CO <sub>2</sub> per 0.1 billion yen, or less	• 23.6 ton-CO <sub>2</sub> per 0.1 billion yen	○	● Reduce CO <sub>2</sub> emissions from the execution phase. Targets: 22.5 ton-CO <sub>2</sub> per 0.1 billion yen, or less	40
			● Reduce construction waste generated. Targets: • Civil engineering final landfill of 1.40% or less • Building construction final landfill of 2.76% or less	• Civil engineering final landfill: 1.35% • Building construction final landfill: 2.50%	◎	● Reduce construction waste generated. Targets: • Civil engineering final landfill of 1.30% or less • Building construction final landfill of 2.32% or less	—

1 Details of the governance system improvement are available in the Corporate Governance Report on our website (<http://www.smcon.co.jp/company/corporate-governance/>).  
2 Details of our environmental initiatives are available on our website (<http://www.smcon.co.jp/csr/csr-environment/>).



# Corporate Governance System

## Basic Concept of Corporate Governance

The SMCC Group aims to maintain close relationships with all stakeholders, including shareholders, customers, local communities and employees, and carry out transparent, fair, fast and bold decision-making by building an efficient and fair management system to achieve sustainable growth and improve mid- to long-term corporate value. To that end, we prioritize the following five actions.

- 1. Quick decision-making
- 2. Designing a highly strategic organization
- 3. Transparent and rational corporate behavior
- 4. Developing a proper internal control system
- 5. Practicing accountability with proper disclosure

With this basic concept, we, as a corporate group, are building and operating a proper internal control system, constantly improving and enhancing our compliance system, and taking fast and appropriate action against risks that may have a significant impact on management.

## Corporate Governance System Overview

For our corporate governance, we have adopted the auditor system and executive officer system. Our executive officers carry out operations. Our Board of Directors is tasked with decision-making and supervision. Our Audit & Supervisory Board and accounting auditor perform audits and monitoring. To improve the transparency and soundness of corporate management, we enhanced the decision-making and supervisory functions of the Board of Directors by increasing the number of external directors to two in June 2016. Additionally, to improve the transparency and fairness of executive appointment and remuneration and enhance corporate governance, we have established the Appointment and Remuneration Advisory Committee as an advisory body to the Board of Directors.

### Officers (as of the end of June 2017)

- Nine directors
- Seven internal directors and two external directors
  - Eight males and one female
- Five auditors
- Two internal auditors and three external auditors
  - Five males

## Board of Directors (held 18 board meetings in fiscal 2016)

The Board of Directors discusses, makes decisions on, and reports on management policies and other important matters concerning the company. The Board holds meetings on a monthly basis, in principle, as well as when necessary. At the meetings, the various directors regularly report the progress of operations they oversee to improve the Board's function of supervising execution.

\* An overview of the evaluation of the effectiveness of the Board of Directors is available at the following site:  
<http://www.smcon.co.jp/company/corporate-governance/> (Japanese only)

## Audit & Supervisory Board (held 17 board meetings in fiscal 2016)

The Audit & Supervisory Board receives audit reports from the auditors, and discusses and makes decisions on important matters concerning audits. The Board holds meetings on a monthly basis, in principle, as well as when necessary. At regular meetings with representative directors, auditors exchange opinions with representative directors to share information and recognition and deepen mutual trust.

## Executive Management Meeting

The Executive Management Meeting, comprising mainly key executive officers, discusses important matters related to the execution of operations. The Executive Management Meeting holds meetings on a weekly basis, in principle, as well as when necessary, to speed up execution of operations and improve operational efficiency.

## Committees

To investigate, discuss and formulate measures with regard to specific company-wide matters that are difficult to address within existing lines of report, cross-sectoral committees, comprising members from related departments, are formed as advisory bodies to the Board of Directors or the Executive Management Meeting. Committees we have established include the Appointment and Remuneration Advisory Committee, the Internal Control Committee, the Production System Improvement Committee, the Overseas Safety Committee and the Diversity Committee.

## Appointment and Remuneration Advisory Committee

The Appointment and Remuneration Advisory Committee, comprising representative directors and part-time external officers, was established as an advisory committee under the Board of Directors. In response to senior management proposals on the remuneration of individual officers and appointment of successors and officers, the committee presents fair and transparent advice, opinions and evaluations at the Board of Directors meetings. By referring to the advice, opinions and evaluations, the Board of Directors makes decisions on remuneration and appointment of officers, etc.

## Office of Audit & Supervisory Board Member

The Office of Audit & Supervisory Board Member was established as an organization under the direct control of auditors, with personnel assigned as dedicated assistants to auditors. To guarantee the assistants' independence from directors, only auditors have the right to direct and instruct the assistants.

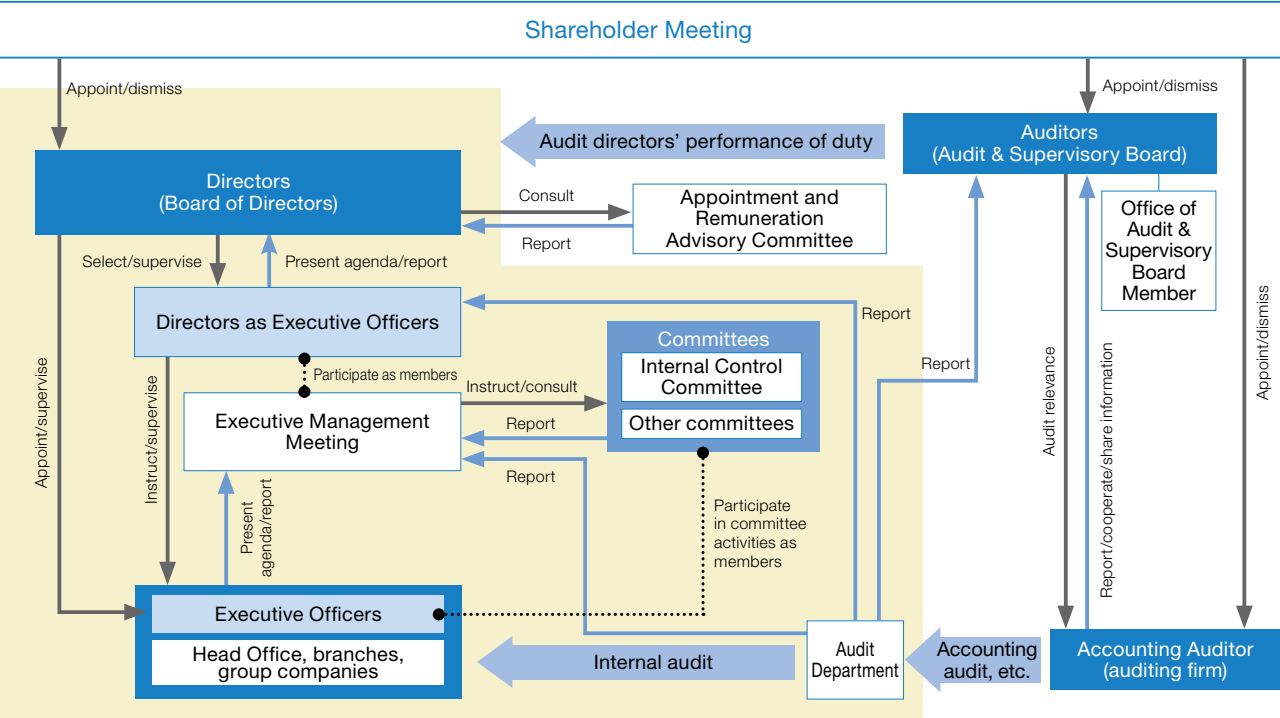
## Accounting Auditor

We have concluded an audit agreement with Ernst & Young ShinNihon LLC to undergo audits in line with the Companies Act and the Financial Instruments and Exchange Act. The accounting auditor reports audit plans and results to the Audit & Supervisory Board, the Accounting Department and departments related to internal control as necessary.

## Audit Department

The Audit Department, as an internal audit department, audits the execution of duties by the respective divisions, including group companies, according to an annual audit plan. The Audit Department reports audit results to the Board of Directors, the Executive Management Meeting and the Internal Control Committee.

## Corporate Governance System (as of the end of June 2017)



## Internal Control Committee

As an advisory committee under the Executive Management Meeting, the Internal Control Committee holds meetings to improve effectiveness in building and operating the internal control system within the SMCC Group. The committee discusses correction and improvement of issues identified in the operation of the Basic Policies for Internal Control, as well as the progress of preventive measures taken as necessary, and monitors the status of operation of the internal control system.

## Status of Compliance with Corporate Governance Code

We are putting into practice the basic principles of the Corporate Governance Code.

\* The Corporate Governance Report is available at the following site:  
<http://www.smcon.co.jp/company/corporate-governance/> (Japanese only)



# Operation of Internal Control System/Improving Compliance

## Basic Concept of Internal Control System

To improve the value of our corporate group, Sumitomo Mitsui Construction and the SMCC Group develop and enhance the compliance system. The basic stance regarding internal control is to take quick and appropriate actions against risks that may have a significant impact on management, properly disclose information to stakeholders and society at large, and develop a highly transparent management system. Sumitomo Mitsui Construction operates its Basic Policies for Internal Control, which it reviews and the Board of Directors adopts every fiscal year.

## Compliance Education

Each fiscal year, we formulate a compliance education plan, and provide compliance education for all employees. We incorporate education about the Construction Business Act and other related laws and regulations into meetings and programs, including training for new recruits and group training for different job categories or ranks, to keep employees informed of and raise awareness of legal compliance. We also provide group companies with compliance education for top-level executives. Each group company familiarizes its employees with the content of the education to promote the understanding and penetration of corporate ethics and compliance management.



Providing compliance education

## Bid-rigging Elimination Program

We have established a bid-rigging elimination program and keep all officers and employees informed of it. The program clearly states the recognition that complete elimination and prohibition of bid-rigging requires the upholding of all the following: (1) the clear and unshakable commitment of senior management to completely eliminate and prohibit the practice, (2) the establishment of internal compliance and monitoring systems, and (3) a full understanding and high level of compliance awareness among company officers and employees. Based on the program, every April, our officers and employees are required to renew and resubmit their written pledges not to conduct or become involved in bid-rigging. Meanwhile, each group company has established its own bid-rigging elimination program and ensures compliance with it.

## Construction Business Act Patrol

In response to having received an instruction in January 2016 from the Kanto Regional Development Bureau of the Ministry of Land, Infrastructure, Transport and Tourism pursuant to the Construction Business Act with regard to defective piling work for a collective housing complex in Yokohama City, we have systematically carried out the “Construction Business Act patrol.” Branches conduct patrols of construction sites that they oversee to check compliance with the Construction Business Act, including assignment of engineers and also covering subcontractors. Results of patrols, issues and other information are shared among all branches. The Execution System Improvement Sub-committee, which is established under the Production System Improvement Committee, examines, formulates and promotes necessary measures.

## Putting up Compliance Posters and Carrying the Compliance Card

To educate employees about compliance in both their on-duty and off-duty conduct, ensure the appropriate operation of i-message (internal reporting system/workplace harassment counseling desk), and inform employees of the reporting and counseling desks, we create and distribute compliance cards and compliance posters. We distribute the cards to all staff members engaged in our operations, including officers, employees, temporary workers and secondees, and require them to carry the card with them at all times. The compliance posters are displayed in noticeable locations within the Head Office, branches, sales offices, sites and affiliates in order to raise awareness of the purpose.

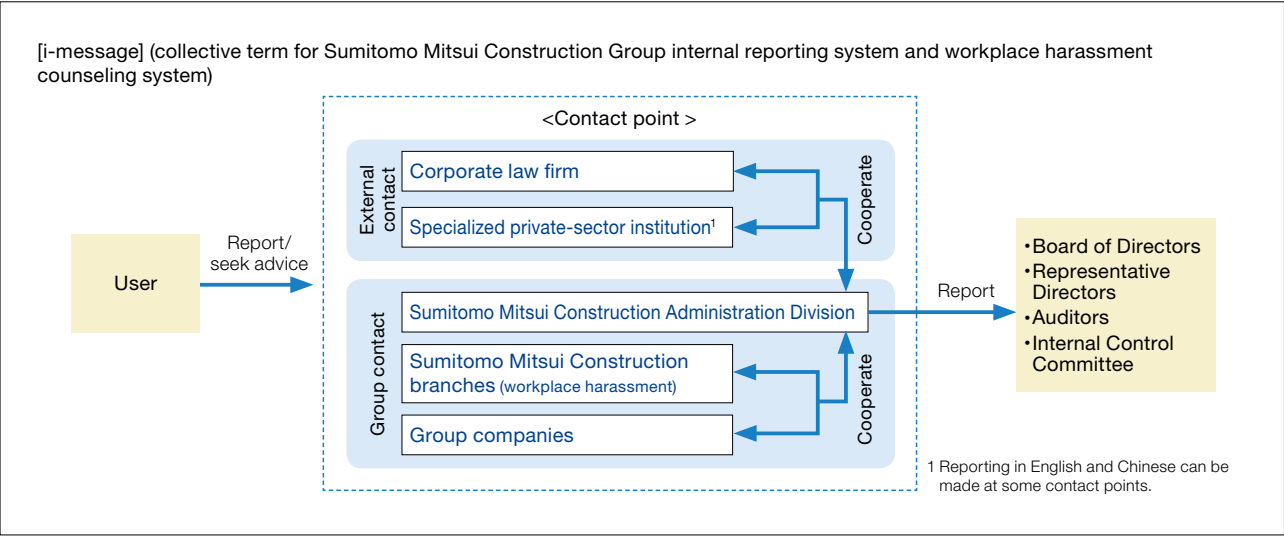


Compliance poster affixed to a wall

## “i-message” Internal Reporting System

For the early detection and correction of misconduct for the purpose of enhancing compliance management, we operate an internal reporting system based on the Internal Whistleblower Protection Regulations. In response to reported incidents, including those at group companies, we take appropriate and necessary actions in a timely manner through close cooperation with our corporate lawyers, with due consideration given to the protection of the whistleblower. In the event a problem is found, we take necessary action against the persons involved according

to internal rules, and implement measures to prevent recurrence. In July 2017, we integrated the existing internal reporting system and harassment counseling system into “i-message.” To rebuild the common group-wide internal reporting system and make it easier to use, we established external counseling contact points at a specialized private-sector institution as well as at a corporate law firm. We will properly operate the system to foster a more disciplined corporate culture and more pleasant workplace environment.



# Risk Management

## Risk and Crisis Management

To reduce risks that may affect business operations and prevent their materialization, we operate a risk control system developed, run and constantly improved based on our Risk Management Regulations. To take fast and appropriate action in response to a materializing risk that does, or could, seriously affect our business operations, we have established Crisis Management Regulations. In our business operations, our committees and meetings examine potential significant risks of each project to prevent their materialization. For events that do materialize, we are enhancing our response system to enable fast action through rapid and unfailing information sharing.

## Information Security

The SMCC Group has established the Basic Information Security Policy. As a member of an advanced information and communication society, the SMCC Group has also built an information security management system (ISMS) and constantly improves the system to properly recognize the importance of

information security and appropriately handle information in its business operations. Sumitomo Mitsui Construction provides ISMS education, through e-learning, to all officers and employees twice a year based on its ISMS risk response plan. In fiscal 2016, to further raise information security awareness among officers and employees, we conducted a targeted attack drill using a simulated e-mail in preparation for the kind of cyber attacks that are becoming increasingly advanced and sophisticated in recent years.

## Safety Measures Outside Japan

To secure the safety of expatriate employees (and accompanying family members) as well as employees on overseas business trips during emergencies, Sumitomo Mitsui Construction has established the Overseas Crisis Management Manual and the Overseas Safety Manual. To examine, formulate and promote measures for securing the safety of employees engaged in overseas business, including local staff, and maintain the system, we established the Overseas Safety Committee, which will hold meetings in the event of a terrorist incident and as necessary.



Business Continuity Plan (BCP)

Recognizing that we have the important social responsibility of providing safety and security through our construction business, we have developed a business continuity plan (BCP) to make efforts to maintain and continue key functions of our own business activities while carrying out restoration, reconstruction and relief activities for affected areas and infrastructure in the event of a disaster.

To strengthen the viability of the BCP, we conducted a BCP drill in March 2017 with a scenario of a large earthquake. During the drill, we tested the operation of a safety confirmation system to maintain a scheme to quickly and unfailingly confirm employees' safety in an emergency, and successfully confirmed the safety of all employees. Using the scenario, we also verified the viability of the BCP and identified issues on a case study basis with regard to the actions taken, from the initial stage to the restoration stage, by the Emergency Headquarters, the Secretariat and teams (working groups under management administration departments).



Emergency Headquarters



Teams working with a scenario

Initiatives for Eliminating Antisocial Forces

Pursuant to the purpose of the Act on Prevention of Unjust Acts by Organized Crime Group Members and other laws and regulations, Sumitomo Mitsui Construction stipulates in its Charter of Corporate Conduct that its employees shall neither respond to unreasonable requests from antisocial forces nor use antisocial forces. The Recital of Laws, which as a supplement to the charter describes the act and how our company should take actions, is used in the training program for new employees. Our Head Office and branches have a department in charge of dealing with unreasonable requests (the General Affairs Department and the Administration Department, respectively), and staff tasked with obstructing unreasonable requests are assigned to these departments.



Recital of Laws as a supplement to the Charter of Corporate Conduct

Serious Risk Event

- (1) With regard to defective piling work for a collective housing complex we constructed in Yokohama City, the rebuilding of all buildings pursuant to the Act on Building Unit Ownership, etc. was decided at a meeting of building unit owners in September 2016. We will continue to have meetings with the rebuilding association, seller and other stakeholders as necessary, and take appropriate actions.
- (2) In November 2016, Sumiken Mitsui Road Co., Ltd. as a member of the SMCC Group and parties related to the company were fined and sentenced to imprisonment (with suspension) for violation of the Antimonopoly Act in a bid for a project to restore paved roads affected by the Great East Japan Earthquake. Sumiken Mitsui Road was ordered to suspend its business in December 2016. We will provide guidance and support to the company in building compliance and risk management systems, and will step up efforts to enhance the internal control of the SMCC Group, including at this company.

Message from External Director and External Auditor

Recognition of Current Corporate Governance and Expectations for the Future

Three years have passed since I was appointed as an external director of Sumitomo Mitsui Construction. Over these years, the performance of the company has significantly improved and the corporate governance system has been steadily enhanced due to the efforts of officers and employees of the Group. In the previous year, the company increased the number of external directors to two, each of whom presents candid questions and opinions at the Board of Directors meetings and other occasions. The Board of Directors engages in active discussion to make proper and reasonable decisions and confirm and address issues. The Appointment and Remuneration Advisory Committee, comprising representative directors and part-time external officers, provides specific advice on the appointment and remuneration of officers, and discusses issues concerning successor plans and officer remuneration. Representative directors and auditors exchange information and opinions on a regular basis, and have serious discussions from the perspectives of the sustainable development of the company and improvement of corporate value.

This fiscal year, the internal reporting system was enhanced to reinforce the internal control of the entire Group both in and outside Japan. We will continue to monitor whether the operation of the system is effective or not, so that the effort will lead to early detection and early solution of corporate risks. It is also expected that efforts for shortening working hours, which is essential to securing diverse human resources and vitalizing employees, will be stepped up group-wide.

I am committed to fulfilling my role as an external director so that Sumitomo Mitsui Construction will improve its corporate value with a high awareness of compliance and fast-acting and bold management under the Mid-term Management Plan.



Kumiko Kitai  
External Director



Yoshiyuki Kato  
External Auditor

Approach to Corporate Governance

While serving as an external auditor over the past five years, I have noticed a steady enhancement of the corporate governance system. For instance, the Board of Directors has increased the number of external officers so that it now has two external directors and three external auditors, who together account for more than one-third of the total of 14 board members. The structure facilitates the active exchange of insightful opinions from broad perspectives, improving the effectiveness of discussions. I am also aware that the newly established Appointment and Remuneration Advisory Committee is having fruitful discussions and therefore contributing to management transparency.

Despite these efforts, a group company violated the Antimonopoly Act two years ago and Sumitomo Mitsui Construction was also responsible for an issue involving defective piling work. As an auditor, I must verify senior management's response to these cases. Regarding the former, I confirmed that the bid-rigging elimination program, which has been introduced to the parent company, was immediately applied to the company in question and all group companies engaged in construction work. As for the latter, I confirmed that the Production Management Division was established and that execution processes are strictly managed to improve the effectiveness of quality control.

This report covers initiatives related to corporate governance in this fiscal year. I am paying attention to the introduction of i-message as a further enhanced internal reporting system, and to work style reforms. I will continue to provide opinions, not just on these themes, from the standpoint of an external director for the improvement of the governance of Sumitomo Mitsui Construction.

Officers



[Photo] Front row, from left to right: Nagamoto (Executive Vice President ), Norihisa (Chairman), Arai (President), Hirokawa (Executive Vice President)  
Rear row, from left to right: Sasamoto (External Director), Kitai (External Director), Sato (Senior Managing Executive Officer), Kimijima (Senior Managing Executive Officer), Mimori (Senior Managing Executive Officer), Nozaki (Auditor), Kato (External Auditor), Watanabe (Auditor), Murakami (External Auditor), Nagashima (External Auditor)

Directors		Auditors					
<div>Yoshiyuki Norihisa</div> <div>Representative Director Chairman &amp; CEO</div> <div>April 1969    Joined Sumitomo Construction Co., Ltd.</div> <div>June 2000    Director</div> <div>June 2001    Executive Officer</div> <div>April 2003    Managing Director, Managing Executive Officer, Sumitomo Mitsui Construction Co., Ltd.</div> <div>April 2007    Director, Executive Vice President</div> <div>April 2008    Representative Director</div> <div>April 2010    Representative Director, President &amp; COO</div> <div>April 2015    Representative Director, Chairman &amp; CEO (to present)</div>	<div>Hideo Arai</div> <div>Representative Director President &amp; COO</div> <div>April 1977    Joined Sumitomo Construction Co., Ltd.</div> <div>April 2010    Executive Officer, Sumitomo Mitsui Construction Co., Ltd.</div> <div>June 2012    Director</div> <div>April 2015    Representative Director, President &amp; COO (to present)</div>	<div>Yoshio Nagamoto</div> <div>Representative Director Executive Vice President</div> <div>Supervising Audit Dept., Secretariat, Public Relations Office, Corporate Planning Dept., Affiliated Business Dept., Administration Div., Business Innovation &amp; Incubation Div. and Global Div.</div> <div>In charge of Audit Dept.</div> <div>April 1975    Joined The Sumitomo Bank, Ltd.</div> <div>November 2005    Representative Director, President, SMFG Servicer Co., Ltd.</div> <div>June 2007    Full-time Auditor, Daiwa Securities SMBC Co., Ltd.</div> <div>September 2009    Advisor, Sumitomo Mitsui Banking Corporation</div> <div>March 2010    Advisor, Sumitomo Mitsui Construction Co., Ltd.</div> <div>April 2010    Executive Vice President, Officer in charge of Audit Dept. (to present)</div> <div>June 2010    Representative Director (to present)</div>	<div>Kazuhiko Hirokawa</div> <div>Representative Director Executive Vice President</div> <div>Supervising Safety and Building Construction Div.</div> <div>In charge of Safety &amp; Environment Managing Dept.</div> <div>April 1974    Joined Mitsui Construction Co., Ltd.</div> <div>October 2010    Executive Officer, Sumitomo Mitsui Construction Co., Ltd.</div> <div>June 2014    Director (to present)</div> <div>April 2016    Representative Director, Executive Vice President (to present)</div>	<div>Masashi Nozaki</div> <div>Full-time Auditor</div> <div>April 1979    Joined Sumitomo Construction Co., Ltd.</div> <div>April 2001    Department Manager, General Affairs Dept., Administration Div.</div> <div>April 2003    Department Manager, Affiliated Business Dept., Management Planning Div., Sumitomo Mitsui Construction Co., Ltd.</div> <div>January 2009    Department Manager, Audit Dept.</div> <div>June 2011    Full-time Auditor (to present)</div>	<div>Yoshiyuki Kato</div> <div>Full-time Auditor (External Auditor)</div> <div>April 1982    Joined The Sumitomo Trust &amp; Banking Co., Ltd.</div> <div>November 2011    Chief Investigator, Internal Audit Dept., Sumitomo Mitsui Trust Holdings Inc.</div> <div>April 2012    Chief, Internal Audit Dept., Sumitomo Mitsui Trust Bank, Limited.</div> <div>June 2012    Full-time Auditor, Sumitomo Mitsui Construction Co., Ltd. (to present)</div>		
<div>Yoshitaka Mimori</div> <div>Director Senior Managing Executive Officer</div> <div>Division Director Building Construction Div.</div> <div>April 1979    Joined Sumitomo Construction Co., Ltd.</div> <div>April 2011    Executive Officer, Sumitomo Mitsui Construction Co., Ltd.</div> <div>June 2015    Director (to present)</div> <div>April 2016    Division Director, Building Construction Div. (to present)</div>	<div>Shoji Kimijima</div> <div>Director Senior Managing Executive Officer</div> <div>In charge of Secretariat and Public Relations Office</div> <div>Division Director Administration Div.</div> <div>April 1979    Joined Sumitomo Construction Co., Ltd.</div> <div>April 2011    Executive Officer, Sumitomo Mitsui Construction Co., Ltd.</div> <div>June 2013    Director (to present)</div>	<div>Tomohiko Sato</div> <div>Director Senior Managing Executive Officer</div> <div>In charge of Corporate Planning Dept. and Affiliated Business Dept.</div> <div>April 1977    Joined Mitsui Construction Co., Ltd.</div> <div>April 2012    Executive Officer, Sumitomo Mitsui Construction Co., Ltd.</div> <div>June 2013    Director (to present)</div>	<div>Kumiko Kitai</div> <div>Director (External Director)</div> <div>April 1976    Joined the Ministry of Labour</div> <div>July 1999    Vice-governor, Shizuoka Prefecture</div> <div>August 2005    Director-General, Equal Employment, Children and Families Bureau, Ministry of Health, Labour and Welfare</div> <div>September 2006    Chief of Secretariat, Central Labour Relations Commission</div> <div>August 2007    Executive Director, Japan Industrial Safety &amp; Health Association</div> <div>June 2011    External Auditor, Takara Holdings Inc. (to present)</div> <div>June 2014    External Director, Kyowa Exeo Corporation (to present)</div> <div>June 2014    Director, Sumitomo Mitsui Construction Co., Ltd. (to present)</div>	<div>Sakio Sasamoto</div> <div>Director (External Director)</div> <div>April 1974    Joined Nippon Kokan Ltd.</div> <div>April 2005    Senior Executive Officer, Manager, General Affairs and Legal Affairs, JFE Holdings, Inc.</div> <div>August 2005    Senior Executive Officer, Department Manager, General Affairs Dept., JFE Holdings, Inc.</div> <div>June 2009    Representative Director, President, JFE Life Corporation</div> <div>June 2012    Auditor, JFE Holdings, Inc.</div> <div>June 2016    Director, Sumitomo Mitsui Construction Co., Ltd. (to present)</div>	<div>Muneki Watanabe</div> <div>Full-time Auditor</div> <div>April 1976    Joined Mitsui Construction Co., Ltd.</div> <div>April 2003    Department Manager, Civil Engineering Design Dept. No. 2, Civil Engineering Administration Dept., Civil Engineering Div., Sumitomo Mitsui Construction Co., Ltd.</div> <div>June 2008    Department Manager, Civil Engineering Marketing Administration Dept., Civil Engineering Marketing</div> <div>June 2014    Full-time Auditor (to present)</div>	<div>Aizou Murakami</div> <div>Auditor (External Auditor)</div> <div>Aril 1974    Registered as a lawyer</div> <div>April 2001    Executive Governor, Japan Federation of Bar Associations</div> <div>June 2002    External Auditor, Airport Facilities Co., Ltd.</div> <div>July 2005    Established Kioi Law Office</div> <div>June 2012    Auditor, Sumitomo Mitsui Construction Co., Ltd. (to present)</div>	<div>Yuzuru Nagashima</div> <div>Auditor (External Auditor)</div> <div>April 1975    Joined Sumitomo Metal Mining Co., Ltd.</div> <div>June 2012    General Manager, Sumitomo Metal Mining Management (Shanghai) Co., Ltd.</div> <div>October 2013    Deputy Department Manager, Corporate Planning Dept., Sumitomo Metal Mining Co., Ltd.</div> <div>June 2014    Auditor, Sumitomo Mitsui Construction Co., Ltd. (to present)</div>



# Initiatives for Local Communities and the Environment



We promote CSR activities based on the Charter of Corporate Conduct. We carry out activities together with local communities for the development of a sustainable society and to fulfill our corporate social responsibility.

## Sumitomo Mitsui Construction Environmental Vision Green Challenge 2020

To leave the global environment habitable by future generations, we have set the Sumitomo Mitsui Construction Environmental Vision Green Challenge 2020 from a mid- to long-term perspective, and are pushing forward with environmental initiatives, including environment-friendly design, execution and technological development, and raising environmental awareness among employees.



## Major Recognition in Fiscal 2016

Organization	Award	Award-winning Work
Japan Society of Civil Engineers (JSCE)	Fiscal 2015 Tanaka Award (Research Paper)	SMCC employee, Assessment of the PC bridge estimated by the property of after 40 years passed PC beam
	Same as above (Excellence in Bridge Design and Construction)	Neak Loeung Bridge (Tsubasa Bridge) (Cambodia)
	Same as above (Excellence in Bridge Design and Construction)	Okegawa Bridge
	Fiscal 2015 Continuing International Contribution Award	SMCC employee
Ministry of Health, Labour and Welfare	Fiscal 2016 Minister's Encouragement Award for Excellent Site in Safety and Health	Kinki Expressway Kisei Line Kurosaki Tunnel Construction
Tokyo Association of Architectural Firms	Tokyo Architectural Design Tokyo Governor's Award	Suwa 2-chome Jutaku Reconstruction
Honshu-Shikoku Bridge Expressway Company Limited (HSBE)	HSBE Safe Construction Award	Fiscal 2013 Kameura Bridge Peeling Prevention
Itabashi City (Tokyo)	Fiscal 2016 Green Curtain Contest Grand Prize (group category)	Itabashi City Hasune 3-26 Site (tentative name)
West Nippon Expressway Company Limited, Kyushu Branch	Letter of gratitude (support for restoration efforts following the Kumamoto Earthquake)	Removal of fallen Furo Bridge, Emergency Measure and Repairing/Reinforcing of Higashibaru Bridge
Japan Institute of Design Promotion	2016 Good Design Award	Lions Kohoku New Town Laurel Court

## Environmentally Friendly Design/Construction Examples

### Lions Kohoku New Town Laurel Court

Giving consideration to the environment during the entire period of execution, including the design phase, is as crucial as cost and safety considerations. For this project, we proposed environmental ideas and cutting-edge environmental technologies to the contractee.

Based on our concept developed in the design phase—designing the environment with the fusion of passive and smart and with advanced technology—we installed solar panels and batteries, used the generated energy to draw water from a well, created a biotope<sup>1</sup> and a creek to provide cool spots on the premises, and directed the flow of wind to improve the indoor environment. With consideration for the environment, we adopted an energy management system that helps reduce environmental impacts, designed a green landscape and installed a biotope. We also ensured that electricity from the solar power generation system is supplied to the common area of the building in the event of a disaster.

Biotopes are rarely created on collective housing sites in Japan. The ABINC certification system, which is operated by the Association for Business Innovation in harmony with Nature and Community, certified Lions Kohoku New Town Laurel Court as collective housing working on biodiversity conservation.

In the construction phase, we saved water, ensured green procurement, reused sludge and concrete debris on the premises, and adopted LED lighting.

The Japan Institute of Design Promotion recognized the project as environment-friendly collective housing, and granted it the fiscal 2016 Good Design Award.

1 Biotope: an area created to provide a habitat for animals and plants



Shower curtain using well water cools the air



Courtyard



Biotope



### Raising Environmental Awareness

To raise employees' environmental awareness, we put in place an award program (environmental category) to grant a President's Award to excellent environmental activities, and provide environmental education through e-learning and group training. We also hold environmental events, including the Green Curtain campaign and a photo contest to see the results of the campaign, and participated in the Ministry of the Environment's Light-Down Campaign.

### Providing Environmental Education together with the Local Community

Our Head Office is located in Tsukuda in Tokyo's Chuo-ku district. Together with a local community association and a local community newsletter, the "Tenku Shimbun," we organize environmental activities, including wild bird watching tours for families and conservation of a rare native Japanese toad species, *B. j. formosus*. Our employees participate in the community-based environmental education as nature observation instructors, helping with the planning and operation of the activity.



Entry submitted to the Green Curtain photo contest



Wild bird watching



"Tsukuda no kaeru kaeru" (Tsukuda's frog is back) activity



Japanese toad, *B. j. formosus*

Employee's Voice

### Contributing to Local Society through Environmental Activity

Our Head Office is situated in a building we built on a corner block in a residential area along the Sumida River that is lined with high-rise collective housing. Having close communication with the local community is therefore important for us from the perspective of corporate social contribution. We proactively participate in the biodiversity conservation activity to maintain a good relationship with the local community and pass on a healthy natural environment to future generations. People tend to have a negative image of the construction industry in terms of nature conservation, but environmental activities, such as what we do, may help improve the industry's image. Moreover, two-way communication may promote safety and security within the local community. Over the four years since the start of the "Tsukuda no kaeru kaeru" (Tsukuda's frog is back) activity, the population of *B. j. formosus*, a Japanese toad, has steadily increased, and local residents now more frequently seek us out to tell us they saw a frog.



Tetsuro Ito  
Environment & Renovation Technology  
Department  
Technical & Engineering Service Division

### Received a Letter of Gratitude for Support for Post-Quake Restoration Efforts

In October 2016, we received a letter of gratitude from West Nippon Expressway Company Limited, Kyushu Branch for our support for restoration efforts following the Kumamoto Earthquake that occurred in April 2016.

From the day after the earthquake we worked around the clock on the removal of the fallen Furyo Bridge across the Kyushu Expressway as well as on emergency measures and repair and reinforcement of the Higashibaru Bridge.

For the construction industry, which plays a part in social capital development, such emergency response related to natural disasters is an important social responsibility. We are making constant efforts to improve our organizational readiness for making quick and bold responses upon request and to improve our technological capability and execution capability so that we can meet requests.



Removing the Furyo Bridge

### Volunteer Tree Planting in the Philippines

Our local subsidiary in the Philippines, SMCC Philippines, Inc., carried out a volunteer tree-planting activity aimed at achieving a better future in October 2016 and March 2017 with the cooperation of the Department of Environment and Natural Resources (DENR) of the Philippines. A total of 60 employees participated on the two occasions. In the second event in March, participants planted mangroves and, when they finished planting, received a certificate from DENR. We hope that the trees they planted will grow and help address global warming, maintain biodiversity, and provide protection against typhoons, tsunamis and other natural disasters.



Granting a certificate



Planting mangroves

### Public Lecture

In April 2016, we organized the second public lecture at our Head Office in Tsukuda, Chuo-ku in Tokyo. More than 40 local residents participated in the event in which three speakers gave lectures on disaster mitigation from their own perspective. Professor Masahiro Osakabe of the Tokyo University of Marine Science and Technology presented a lecture titled "Local Disaster Prevention and Energy." Mr. Toshio Yoshida, Fire Captain from the Rinko Fire Station under the Tokyo Fire Department lectured on "Fire and Disaster Prevention using Disaster Prevention Handbook 'Tokyo Bosai.'" Mr. Yoshimori, then Director of Sumitomo Mitsui Construction's Business Innovation & Incubation Division, spoke on "Disaster Mitigation." The participants heard an explanation of the mechanisms of earthquakes and their impact on buildings, and of actions to be taken in the event of a disaster, and gained a deeper understanding of efforts against possible issues that may emerge in the event of a disaster.



Lecturers and participants exchanging views



Third Party Opinion

Masahiko Uomori

Former Auditor  
RIKEN, Japan  
Visiting Professor  
Shibaura Institute of Technology Graduate School  
Executive Director  
Center for Collaborative Interdisciplinary Sciences  
Executive Director  
NPO Peet-Greening Association  
Author of *Nihon no gijutsu to kokoro*  
(Japanese Technology and Spirit), Maruzen



Recent weather events are nothing short of extreme and are accompanied by frequent emergency warnings. I would like to express my heartfelt sympathy to people affected, and hope for the earliest possible recovery. With regard to earthquakes, quake resistance has been reviewed and measures to reinforce quake resistance have been taken for schools and other large structures. On the other hand, measures against extreme wind or flooding on the order of a “once-in-50-years” or “once-in-a-century” event have not been sufficient. Reviewing rules and regulations related to civil engineering and building construction is an urgent matter. In addition to natural disasters, I would like to raise the issue of a man-made disaster. As construction works continue at a rapid pace for the Tokyo 2020 Olympic and Paralympic Games, an incident related to illegal overwork occurred at the National Stadium construction site. I hope Sumitomo Mitsui Construction will enhance its governance to prevent such problems.

Characteristics of this Report

- The Message from the President at the beginning of the report clarifies the basic policies of the company by emphasizing restoration of creditability and sustainable growth and explaining specific measures to achieve them, i.e., reforming the production system and securing, cultivating and vitalizing human resources.
- The president refers to the promotion of work style reforms (work-life balance). Diversity is necessary in the workplace, which used to be considered a men-only space. The target percentage of female employees should be indicated.
- Key projects completed in fiscal 2016 are clearly presented in self-explanatory photographs so that readers can see the company’s achievements at a glance.
- Each chapter is clearly divided and independent, which allows readers to easily understand the content.
- This year’s report is well balanced as a whole because it devotes many pages to human resource development and environmental conservation, as I requested after reading the previous year’s report.
- I hold the message from an external auditor on the defective piling work in high regard.

Requests for Next Year’s Report

- The five basic policies for the corporate governance system should be explained in concrete terms to help readers understand the policies more deeply.

- The validity of the business continuity plan (BCP) is verified and its issues are identified on a workshop basis. However, specific issues and how to prepare for them should also be described.

Aspects to Be Continued or Promoted

- Providing a strong message from the president to society and employees
- Enhancing CSR activities based on the Charter of Corporate Conduct. There are three years left to complete the Green Challenge 2020. Past achievements should be put together as an interim report.
- “Employee Talks about...” sections help readers understand the work of employees and how they contribute to the company and society. Other employees may be motivated by these sections, and desire to have their work and thinking covered in the next year’s report.
- “Partner’s Voice” provides an opportunity to hear the valuable opinions of partners, including their views on safety measures. Normally, there are few chances to hear feedback from partners, who need to complete their tasks by the deadline. Therefore, society would like to hear from them.
- The business overview of each division is provided on the same page, enabling stakeholders to easily grasp the business of each division. This should be continued.
- The “Focus on the Field” section under Securing, Cultivating and Vitalizing Human Resources features specific cases, which may be used as a reference by other divisions. In particular, the comments from individuals in positions of responsibility should continue to be included.
- I request that progress on the issue of the defective piling work, which was a serious risk event, be covered in an ongoing manner. As one saying goes, “Turn a misfortune into a blessing.” A sincere response leads to the restoration of creditability and helps expand business.

As I mentioned at the beginning, recent extreme weather events prove that conventional safety measures and safety standards are insufficient. If no preparatory actions are taken, public attention will turn to the parties responsible for the construction. I strongly encourage Sumitomo Mitsui Construction, as the leading company in the civil engineering and building construction industry, to work on the issue ahead of peers to lead the industry forward.

Corporate Profile

■ Outline (as of the end of June 2017)

Company Name	Sumitomo Mitsui Construction Co., Ltd.	Capital	12 billion yen
Head Office	2-1-6 Tsukuda, Chuo-ku, Tokyo, 104-0051, Japan	Number of Employees	2,617 (4,444 on a consolidated basis) (as of the end of March 2017)
Founded	October 14, 1941	Business Profile	Design, engineering and execution of civil, building and prestressed concrete works, and related operations
Representative	Hideo Arai, Representative Director, President & COO		

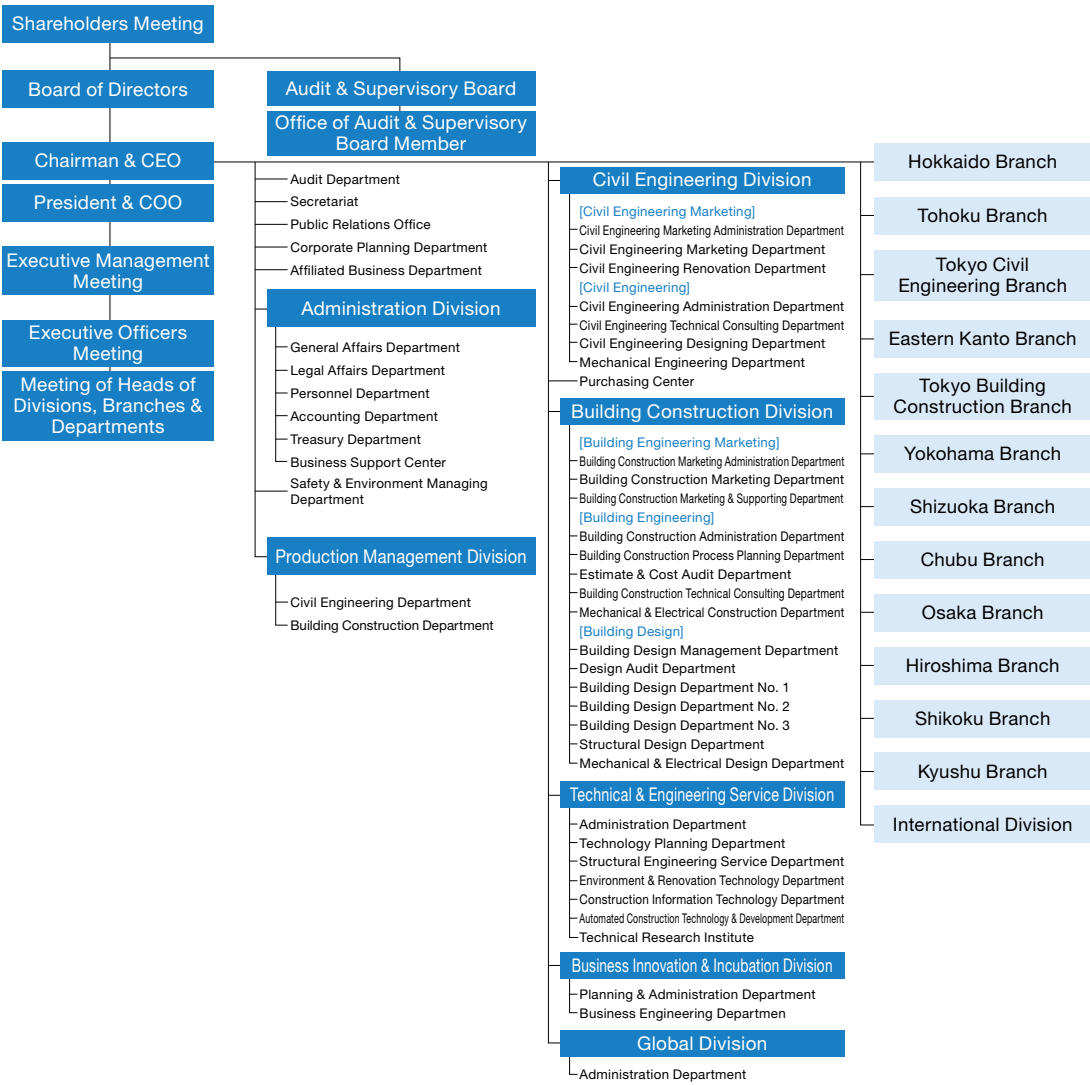
■ Affiliates in Japan

Sumiken Mitsui Road Co., Ltd.	Paving, road construction, landscaping and general civil engineering
SMC Co., Ltd.	Sale of building materials, insurance agency
SMC Preconcrete Co., Ltd.	Manufacture, sale and execution of secondary concrete products and prefabricated concrete products
SMC Reform Co., Ltd.	Renovation business
SMC Civil Technos Co., Ltd.	Contract construction for general civil engineering and river works, repairing and reinforcing of concrete structures
Seiwa Co., Ltd.	Contract construction
SMC Tech Co., Ltd.	Shield, tunnel and prestressed concrete works, and leasing of construction machinery and materials
Aseismic Devices Co., Ltd.	Sale of seismic isolation and control equipment
Fibex Co., Ltd.	Aramid fiber reinforcement
Yoshii Planning Co., Ltd.	Real estate business (development of the Dogodaira housing complex)
Amenity Life Co., Ltd.	Operation and management of private retirement homes
Cosmo Planning Co., Ltd.	Printing, information systems and personnel and general affairs services, and sale of measuring instruments and software

■ Subsidiaries Outside Japan

SMCC Philippines, Inc. (Philippines)  
SMCC Guam, Inc. (U.S.A.)  
SMCC Overseas Singapore Pte. Ltd. (Singapore)  
Pt. SMCC Utama Indonesia (Indonesia)  
SMCC (Thailand) Co., Ltd. (Thailand)  
SMCC Construction India Ltd. (India)  
SMCC, Shanghai (China)  
SMCC Malaysia Sdn. Bhd. (Malaysia)

■ Organization



■ Response to Third Party Opinion

Mr. Uomori points out that conventional safety measures and safety standards for social infrastructure are insufficient. This is a big issue that cannot be addressed by one company alone, but we will sincerely consider how we can fulfill our role as a member of the construction industry engaged in infrastructure development.

This year's report features Value Creation Stories describing how we address recognized issues with corporate strategies and governance and improve our corporate value. To a certain extent, Mr. Uomori appreciated the improvements we made in response to what he pointed out last year. We will make continued efforts to communicate our initiatives for addressing social issues and our own issues to stakeholders in an easy-to-understand manner.

Tomohiko Sato  
Director  
Senior Managing Executive Officer  
In charge of Corporate Planning Department