

# KOBELCO

## KOBELCO CONSTRUCTION MACHINERY CO., LTD.

**Tokyo Head Office:** 5-5-15 Kitashinagawa, Shinagawa-ku, Tokyo 141-8626 (5th floor, Osaki Bright Core Bldg.) Phone: +81-3-5789-2111  
**Hiroshima Head Office (Hiroshima Factory):** 2-2-1 Itsukaichiko, Saeki-ku, Hiroshima-shi, Hiroshima 731-5161 Phone: +81-82-943-5321  
**Okubo Factory:** 740 Yagi, Okubo-cho, Akashi-shi, Hyogo 674-0063 Phone: +81-78-936-1331  
**Ogaki Factory:** 1682-7 Motoima-cho, Ogaki-shi, Gifu 503-0932 Phone: +81-584-80-0500  
KOBELCO Global Website <https://www.kobelcocm-global.com>

### ●Report subjects

**Subject organizations:** KOBELCO CONSTRUCTION MACHINERY CO., LTD. and affiliated companies

**Period covered:** April 01, 2017 to March 31, 2018  
(Some contents include information from after April 01, 2018)

**Report issue:** July 2018



Recycled paper has been used for this pamphlet.

KOBELCO CONSTRUCTION MACHINERY GROUP  
Thinking of the Future of People and the Earth

# SOCIAL ENVIRONMENTAL REPORT 2018

KOBELCO CONSTRUCTION MACHINERY CO., LTD.



## Message from the President

# Contributing to the Realization of a Better World by Constantly Creating Products and Services with True Value

### Established by Integration for a Stronger Business Foundation

Two years ago the KOBELCO Group established a medium-term five-year plan in FY2016 in order to develop and expand our business operations, and this fiscal year marks the third year of this plan. I believe that FY2018 is an extremely important year given the changes in the needs and demand trends of our customers as we move towards 2020, the last fiscal year in which our plan will be completed.

At the same time as this five-year plan, we also saw the birth of a new KOBELCO CONSTRUCTION MACHINERY created by integrating the management of KOBELCO CONSTRUCTION MACHINERY (Excavator Div.) and KOBELCO CRANES (Crane Div.). For two years, we have experienced positive effects from our structural reorganization in the form of optimized business management, strengthened product development capabilities, and accelerated global development. The structural reform for the integration of our excavator and crane operations was complemented by the integration of our European operation bases at the end of 2017, perfect timing for us to really spread our wings by expanding and improving our operations.

### Perceiving Diverse Needs to Respond Rapidly

Reflecting on the previous year shows an increase in the global demand for construction machinery due to factors such as a recovery in demand for hydraulic excavators in China, Indonesia, India, and other Asian countries, as well as strong European and American markets. Even Japan has enjoyed a period of continuous high growth, exceeding that of the Izanagi economic boom (for 57 months in 1965-70) in September of last month, with this growth considered to be due to the strength of construction machinery investment based on the demand created by the Olympics as well as the demand for upgrading infrastructure.

However, as this favorable tide continues, there is a major issue of a shortage of labor in the domestic construction industry. One of our solutions to this issue is to accelerate i-Construction compatibility with our "Horunavi/Horunavi + PLUS" system machines equipped with 3D machine control that allows inexperienced excavator operators to easily operate the machine with the same level as a veteran operator. Taking advantage of KOBELCO CONSTRUCTION MACHINERY's own unique IoT, we have been creating preventive technology for unexpected machine stoppage such as our "KSCAN" preventive maintenance function that suggests maintenance before a problem occurs. Another issue facing the construction industry is that of eliminating work-related injury or death, for which we have introduced our "K-EYE PRO", a collision reduction system equipped with an automatic deceleration/stop function that is the first in the construction machinery industry.

We are additionally continuing to rapidly and precisely meet the new needs of our customers as seen in the release of new models by the Crane Division such as a 300-ton crawler crane for general use in overseas markets and a TK crane for basic applications.

### To Continue to be Indispensable for the Development of a More Prosperous Society

Looking internally at our company, we will be further expanding and developing the "Work Style Reform" started in FY2016 through measures aimed at creating an environment in which all employees of the KOBELCO CONSTRUCTION MACHINERY GROUP can work challenging yet rewarding jobs in which they perform meaningful tasks. In addition to the many positive benefits and affects we have seen and felt over the last two years since these efforts started, I have felt even more strongly how those around me have also changed by not only my talking about changes, but also by my taking the initiative to act. As we change our individual awareness, we also improve the quality of our work by providing mutual support to each other through active communication, with the ultimate goal of establishing lifestyles that contribute positively to individuals, companies, and society. Previously, we have created new value in regards to the environment in the form of "Low fuel consumption" and "Low noise". Now, we will continue to produce products and services having true value for our customers with a strict adherence to compliance serving as the major principle for all our actions and philosophy, and by each and every employee embodying our "Spirit" in the form of a mindset, sense of values and standard of conduct that is shared by all employees of the KOBELCO CONSTRUCTION MACHINERY GROUP. We will continue to deliver value to society through our daily business operations as we grow together with society. Finally, I would like us to continue to work and act in a manner that is indispensable to developing a more prosperous society.

KOBELCO CONSTRUCTION MACHINERY CO., LTD.  
President & CEO

Kazuhide Naraki

## Corporate Philosophy

### Management Philosophy

Focusing on the needs of users in the field, we dedicate ourselves to satisfying our customers by supplying them with products, services, and information that have true value, while contributing to the creation of a prosperous society.

### Business Vision

In order to create a recycling-based society that is friendly to people and the environment, we intend to provide our customers around the world with innovative solutions that incorporate our creative wisdom and know-how.

Through activities that maximize customer value, we aim to achieve lasting growth and become a leading global brand.

### SPIRIT

With a management philosophy that is dedicated to satisfying customers and contributing to society, all of our actions must meet that philosophy.



## Compliance

### INTEGRITY: Our Sincere Commitment

Compliance is a major principle for all our actions and philosophy. INTEGRITY is the most important attitude needed to realize compliance. We must be sincere in our dealings with countries and regions, companies and departments, clients and all of our one-to-one relationships, and we must carefully comply with all rules and manners. Persistence in holding a highly ethical viewpoint and sincere attitude, never yielding to influence or coercion, is the foundation for realizing our corporate philosophy, including our corporate spirit. This philosophy is converted to personal conviction and then realized one step, one person at a time. This is the ideal that we are constantly pursuing



## Environmental Conservation Activities

From product development to production, we consistently infuse an awareness of decreasing our environmental impact to achieve eco-friendly manufacturing processes.

## CSR of KOBELCO CONSTRUCTION MACHINERY GROUP

The KOBELCO CONSTRUCTION MACHINERY GROUP continues to pursue earth and human friendly activities from the perspective of construction machinery manufacturing and also the standpoint as a company. We have implemented an organizational structure for CSR activities, and all group members have got involved in the CSR activities in accordance with the activity policies.

## Social/Regional Activities

Striving to our goal of being a company with an essential role in creating a bright future, we are continuously performing support activities in close linkage with and with mutual support of local communities.

## Connection with Stakeholders

By proactively sharing information, we are deepening mutual understanding, and contributing to the overall development and expansion of all of our business operations. We are also striving to improve our workplace environment/manufacturing processes.

CSR Messages from KOBELCO CONSTRUCTION MACHINERY GROUP, Thinking of the Future of People and the Earth

### MESSAGE

1

The KOBELCO CONSTRUCTION MACHINERY GROUP utilizes the know-how gained from our actions regarding environmental issues in order to perform global environmental conservation activities in our own unique manner.

### MESSAGE

2

Based on the concept of "Thinking of the Future of People and the Earth", the KOBELCO CONSTRUCTION MACHINERY GROUP strives to contribute to local communities and coexist in harmony with local residents.

### MESSAGE

3

The employees of the KOBELCO CONSTRUCTION MACHINERY GROUP are valued partners, who share tears, laughter and encouragement, in our effort to achieve a better future.

## CSR Activity Policy

- The KOBELCO CONSTRUCTION MACHINERY GROUP carries out conservation efforts targeting the global environment in our own unique manner.
- The KOBELCO CONSTRUCTION MACHINERY GROUP strives to contribute to local communities and coexist in harmony with local residents.
- Together with our employees, the KOBELCO CONSTRUCTION MACHINERY GROUP continues to actively pursue the creation of a better future.

## CSR Activity Policy

### Basic Policy for Further Enhancing Corporate Value Through Group-Wide Environmental Management

Aiming to be an advanced environmental business enterprise, the KOBELCO CONSTRUCTION MACHINERY GROUP shall fulfill its corporate social responsibilities and raise its corporate value by putting the following three principles into practice:

- (1) Reducing the environmental impact from production
- (2) Contributing to the environment through products, technologies and services
- (3) Maintaining a relationship of trust and collaboration with society at large

## Our Activities

### Special Feature I

#### Contributing to Local Communities



#### Reflecting on the Great Sichuan Earthquake 10 years Later

The Great Sichuan Earthquake caused unprecedented damage and injury to Chengdu City in China. We provided assistance to areas affected by the earthquake together with customers and distribution agents, and the spirit of those activities still continues today in different forms. We reflect on activities to support recovery in the area carried out by KOBELCO CONSTRUCTION MACHINERY GROUP together with local communities.

PAGE 05

### Environmental Conservation Activities

#### Products



#### Focusing on the Next Generation, KOBELCO Construction Machinery Creates Environmentally Friendly Technologies

KOBELCO construction machinery products are equipped with various highly environmentally friendly technologies such as low fuel consumption and low noise. Also, we are targeting enhanced workability and safety while developing "Terrestrial Construction Machinery" operated in various working sites across the globe. We will lead the times by further optimizing the work efficiency with a high level of environmental performance by focusing on the future of the global environment.

PAGE 11

#### Production



#### Contributing to the Environment by Constantly Eliminating the Smallest Wastefulness

Through actions such as fundamentally improving our product distribution, improving air loss in production processes, and adopting use of LED lighting at all production bases, we are implementing energy-saving measures and reducing waste to decrease CO<sub>2</sub> emissions. Not only focused on the environmental performance of our products, we are also constantly striving to reduce our environmental burden by instilling a strong awareness of environmental conservation in our manufacturing and transportation processes.

PAGE 13

### Regional Activities

#### Interaction



#### Mutual Support of Local Communities to Create a Better and More Prosperous Society

We are continuously performing support activities based on the direct participation of our employees in every area where the KOBELCO CONSTRUCTION MACHINERY GROUP is operating. Through participation in community development events, and various activities such as cleanup and beautification, and forest maintenance activities, we are able to increase and enrich our interactions with all local residents and contribute to the creation of a better and more prosperous society.

PAGE 15

### Special Feature II

#### Work Style



#### Lifestyles that Contribute Positively to Individuals, Companies, and Society

We have launched our "Work Style Transformation" in pursuit of rich and fulfilling styles of working in order to improve personal happiness and our abilities as a company. "Work Style Transformation" measures, carried out for the last three years, have enabled the concepts to really be absorbed by each and every employee, and we are gradually seeing results all across the company.

PAGE 17

### Connection with Stakeholders

#### Customers and Business Partners



#### Expanding Communication Circles for Mutual Enhancement of Positive Qualities

We have set up various types of opportunities to improve communication with our customers and business partners (clients and suppliers), through booths at trade exhibitions and production liaison conferences, as means to share information and create relationships of mutual trust. We are strengthening our bonds through mutual understanding and learning from others in order to promote prosperity that exceeds the bounds of our Group and extends to the entire industry.

PAGE 19

#### Workplace



#### Creating Workplaces that Provide Job Satisfaction for Everyone

We are actively improving and enhancing the ways in which our employees work with consideration for a work/life balance so that all employees feel enriched both mentally and physically. We are also creating workplace environments that support the full and active participation of all employees by promoting diversity, improving our employee training system, and similar actions so that these various activities will provide internal revitalization and improved technical capabilities.

PAGE 20



# 10 Years after the Earthquake

Unprecedented earthquake struck Sichuan Province in China in 2008. Although KOBELCO CONSTRUCTION MACHINERY GROUP's base of operations in Chengdu City was also damaged, we focused our efforts not only on the restoration of our own company but also on the recovery of the local community. As assistance efforts continue, a CSR Committee was established based on the opinions of our employees. Although the format has changed, we have continuously contributed to society during the ten years since the earthquake. We take a look back at this historic earthquake that caused much emotional damage and also marked the beginning of many important revelations.

## ■ Results of Recovery Support Activities

### Assistance for Areas Affected by the Earthquake

For Chengdu City, seriously damaged by the earthquake, we donated two hydraulic excavators (20-ton and 25-ton classes) and four wheel loaders the day after the earthquake to provide assistance for recovery work in affected areas. KOBE STEEL and the entire KOBELCO CONSTRUCTION MACHINERY GROUP contributed 1 million yuan to support recovery efforts.

Donation of  
Construction Machinery  
**6** vehicles



### Rebuilding and Assistance for Qingxing Shengang Primary School

We participated in plans for the rebuilding and restoration of damaged elementary schools in Chengdu City, and rebuilt a primary school damaged by the quake in Pengzho City. A new school building opened to classes in September 2009, about one and half years after the earthquake. We also contributed fixtures, playground equipment, and other school furnishings, and have been providing continuous assistance since that time.

Contribution of School Bags  
**725** (2009 to 2017) bags



### Tree-Planting Activities

We participated in tree-planting activities in the area in order to repair and reinforce mountains that collapsed due to the earthquake. In 2011, KOBELCO collaborated in a joint project of the Japan International Cooperation Agency (JICA) and Sichuan Province, after which a great number of employees took part in tree-planting ceremonies in various communities, and we continue to actively carry out forest protection activities.

Participants in  
Tree-Planting Activities  
**188** (2011 to 2014) persons



## We Take Our Mission as a Construction Machinery Manufacturer to Heart

On May 12, 2008, a massive earthquake of magnitude 8.0 struck Sichuan Province in China. The region was devastated and two operational bases of the KOBELCO CONSTRUCTION MACHINERY GROUP in Chengdu City, 90 km from the epicenter, were also damaged. Gratefully, our company suffered only minor damage, and we were able to restart operations with astounding speed, thanks the sense of responsibility and cohesiveness of our employees. At the same time, we were actively involved in recovery assistance in areas affected by the earthquake. KOBELCO immediately provided construction machinery and donated money for assistance. However, our most unseen efforts were put into supporting of construction machinery to operate continuously in the affected areas. We talked with Li Chaoyang who served as the Earthquake Recovery Team Leader. "Our responsibility as a construction machinery manufacturer is to produce excavators that are essential for recovery operations and support their operation. That is our form of recovery assistance." Service personnel were dispatched to the various areas affected by the earthquake. They stayed on site in order to be able to respond to any problem, and it occurred with everyone living out of tents for at least a month. Our actions to achieve recovery as quickly as humanely possible for the benefit of the earthquake victims coincided with the philosophy of the CSR activities of the KOBELCO CONSTRUCTION MACHINERY GROUP that promotes consideration for both individuals and society.



KOBELCO CONSTRUCTION MACHINERY (CHINA) CO., LTD.  
Deputy GM, AS Div.

Li Chaoyang

## TALK SESSION. 1

### From the Front Lines of Recovery Assistance

Construction machinery is indispensable for recovery from an earthquake. However, transporting machinery into mountainous area struck by an earthquake is dangerous, and operators have to work under the harsh environment. Let's listen to what some employees who provided unheralded support for our excavator assistance to affected areas.

#### Tremor Felt Even 1,000 km to the East

—Where were you and what were you doing when the earthquake struck?

**Xu:** I was engaged in service-related work in Hangzhou (150 km south west of Shanghai). I felt the tremor just as I started to do some work in the office, so I checked on the Internet immediately and was shocked by the news.

**Cheng:** I was also performing service work by extracting machine data on-site in Shijiazhuang (200 km south west of Beijing). I didn't notice the earthquake but it shook a little. I learned about it when I returned to the office and saw the news. I simply could not believe it had really happened.

**Jiang:** I was performing logistics management in the Marketing Div. in Chengdu. Although I was in the building when the earthquake struck, the building shook so hard that we all panicked and

went running outside to take refuge. It was quite frightening. Our company was closed for three days and reopened from May 15.

#### Sending Excavators to Earthquake-struck Areas

—Tell me about the disaster recovery support that each of you worked to provide.

**Jiang:** The first support provided by the KOBELCO CONSTRUCTION MACHINERY GROUP was in the form of SK260 units and wheel loader that were donated on the 16th, the day after we restarted

operations. I was responsible for getting this machinery delivered to the affected areas. Although it wasn't a donation, we also received an order from the government for 17 compact excavators. As the earthquake struck mountainous regions, there were many areas where large excavators could not be brought in due to landslides and collapsed roads, so there was a need for a great number of small construction vehicles. I was responsible for the transport of the 13 vehicles we shipped from Chengdu on May 20.

**Xu:** And I was responsible for the procedures to bring the remaining four vehicles in from Shanghai.

From the left:  
KOBELCO CONSTRUCTION MACHINERY (CHINA) CO., LTD.  
Engineering Sect., Engineering Dept., AS Div.

**Xu Cong**

Parts Planning and Sales Sect., Parts Dept., AS Div.

**Cheng Yanwei**

Product Management Sect., Sales Admin. Dept., Marketing Div.

**Jiang Chao**





—How was transporting machines into the earthquake-affected areas different from what was normally required?

**Jiang:** We used seven transport vehicles, each carrying two excavators, and with two front and back guide vehicles, making for a convoy with a total of nine vehicles. Although we normally do not use guide vehicles when transporting excavators in China, we used them here at the front and back of the convoy due to the dangerous conditions of the roads, and I was in charge of providing guidance for the journey.

—What about activities for service support?

**Cheng:** On May 20, we gathered service personnel from various areas in Chengdu. Before that, our company had investigated the status of all 187 excavators in the affected areas and dispatched two-person teams of service personnel to each earthquake-struck area. I also loaded a service vehicle with parts and tools, and went to the sites where work was being performed. After repairing and servicing machines damaged in the earthquake, I stayed overnight at the work site to provide support for construction machinery so that



recovery activities could be performed without interruption. I lived in tents for some three months.

**Xu:** I went to affected areas together with service personnel from our distribution agents. The excavators were working at full capacity, clearing rubble, rescuing people, repairing roads, and many other tasks. We worked very hard because recovery would become stopped at a site if construction machinery stopped working.

Excavators Operating in a Rough Environment

—How were the machine breakdowns and problems different from what you normally deal with?

**Cheng:** Notable damage in that regard consisted of objects that had fallen on or collided with an excavator. Normally, we rarely have to deal with problems like crushed hoses, but we saw a lot of that from the earthquake.

**Xu:** Because we operated non-stop in the unusual post-earthquake environment, much of the construction machinery operating in the affected area had been damaged. But, since we had to find some way to operate the excavators, we overused them in severe conditions. There was a shortage of fuel forcing us to use poor quality fuel. Oil became thick and pitch

black, and hose seals were damaged, resulting in oil leakage. The rubble, dirt, and dust were so heavy that oil filters would soon become clogged.

**Jiang:** We had no choice but to operate excavators even if it meant damaging the machine. When I was helping transport excavators, we came across half-collapsed roads where construction machinery was parked waiting for repair. We worked night and day every time there was something damaged.

**Xu:** Everybody felt the same way. Our number one thought when making repairs was to get them done as quickly as possible.

Assistance on the Edge of Danger



—Were there any dangerous or difficult situations?

**Xu:** There were many cracks in dams and landslides, with one dammed lake that seemed like it was going to burst. The water level steadily became higher as the days passed, resulting in people having to be evacuated from some areas. I felt a bit uneasy as I was working at a site nearby that dam.

**Cheng:** The severed roads all over the place forced us many times to stop the vehicle and continue walking to the work site. There was one time when we couldn't return to the vehicle after repairs were completed because a landslide had occurred blocking the return trail, so I ended up having to walk some 20 km. The large number of aftershocks also made many roads unusable. The huge amount of mosquitoes was also a nuisance (laughter).



—Since roads were impassable, it must have been dangerous to transport the excavators.

**Jiang:** Although there was great danger from landslides and other bad road conditions, we were luckily not involved in any serious accident. However, it did require more time than originally thought. Transporting compact excavators to some 200 km from Chengdu normally requires three to four hours, but we had to make detours due to the roads made impassable by the earthquake, and occasionally we encountered detour routes that had collapsed. We were constantly facing the damaged roads. The road was repaired so the vehicles could pass, then we encountered another collapsed area,

repaired it... Due to continuously repeating this cycle, it took us four full days to reach the affected area. The affected area was also chaotic, resulting in it taking us three days to complete delivery and then two days to return, driving through the night. It should have normally taken one day to perform, but ended up taking some 10 days.

Consideration for People and Society

—How do you feel now about your disaster recovery support efforts?

**Jiang:** In China, the military first enters the dangerous affected areas. When residents see the military, they know that they have come to help. They are followed by excavators. I was so happy when an earthquake victim said to me, "I felt relieved when I saw the excavators." Although building houses and roads is certainly "exciting", I was really moved by hearing that excavators could provide other people with a "feeling of relief". I felt I made a new realization about the significance of the existence of excavators.

**Xu:** There was a shortage of fuel in the affected areas. KOBELCO excavators can operate longer than those of other manufacturers on the same amount of fuel. Thinking about that, it seemed to me that this meant they made an unseen contribution.



**Cheng:** Although KOBELCO CONSTRUCTION MACHINERY GROUP is the only company I have worked for since I graduated university, I was able to gain a sense of how our company is one that values people on a regular basis. I feel that this was fully demonstrated in our earthquake recovery assistance activities. Although there were many companies providing assistance centered in Chengdu and other nearby towns, I think that only KOBELCO was capable of transporting parts and machinery to the relief work sites, and camping out to provide support for construction machinery.

**Jiang:** Although the KOBELCO CONSTRUCTION MACHINERY GROUP has always been a company focused on improving environmental awareness by low fuel consumption and other ecologically oriented measures, I personally had never thought much about it. But the earthquake made me really think about people and the environment. We formed a CSR Committee that I believe will allow us to provide assistance with an even more fully prepared system if something similar occurs in the future.



Support of Our Partners:  
Assistance Provided by Distribution Agent

● Assistance Details	24-Hour Free Repair Service	Parts Provided Free of Charge	Monetary Donation for Assistance
----------------------	-----------------------------	-------------------------------	----------------------------------

Sichuan Great Huaye Construction Machinery Co., Ltd.  
President  
**Yuan Hongmeng**  
Distribution agent for KOBELCO since 2001. The company has 105 employees and six branches in the Sichuan region.

### Repairs and Parts Free of Charge to Keep Excavators Operating

We happened to have three service persons in affected areas when the earthquake struck. After hearing about the conditions, I told them to stay in position as we dispatched more service personnel to the affected areas. A dozen of service personnel stayed in tents as they responded to problems with construction machinery in affected areas. Both repairs and parts were free of charge. Because there were some areas where only military and other related personnel were allowed to enter, we instructed military personnel on-site about the features of the machinery so that they could operate them appropriately. Out personnel drove around in cars to provide repair services, stopping to talk with KOBELCO machinery operators when they met, then sometimes providing them with repairs and parts right then and there.

We also tried to help customers who came into our branches to buy parts, by providing them with anything that might help them in their recovery efforts free of charge. We loaned out excavators with more predicted replacement parts than usually thought necessary. We provided as much support as possible to make sure that construction machinery in the affected areas could continue operating. Our attitude was that we had to do whatever we could to help.

Support of Our Partners:  
Assistance Provided by User

● Assistance Details	Machinery Provided Free of Charge	Rescue Residents	Clear Rubble	Repair Roads
----------------------	-----------------------------------	------------------	--------------	--------------

Pengzhou Xinhui Construction Machinery Leasing Co., Ltd.  
President  
**Wu Yunfu**  
Started operations in 2008. Currently has seven staff members with three mid-size excavators for various work sites.

### Participation in Rescue/Recovery Activities in Affected Areas under Military Command

My house and company are in an area affected by the earthquake, and rescue and recovery work were started under military leadership immediately after the earthquake. So, we volunteered our services and worked under the command of the military. First we rescued buried people using excavators to clear away the rubble of collapsed buildings. For one week immediately following the earthquake, machine operators worked in shifts to continuously search for trapped survivors and we rescued some people. After that, we repaired roads. Even though all the fuel was provided at our expense, our driving force was the feeling that we had to do something to help.

One time I saw the river water increased, leaving some people stranded on the opposite bank. As the flow of the river became faster and the bottom of the river was filled with rubble, people got on the back of the excavator to be rescued. Because the construction machinery are tall and can easily traverse damaged roads. The excavator went back and forth numerous times to finally rescue more than 100 persons. I am really proud our excavators for performing various tasks in such catastrophic conditions. They serve as important partners in our life.



## TALK SESSION. 2

# Rapid Restart of Operations through Cohesiveness and a Sense of Mission

KOBELCO CONSTRUCTION MACHINERY (CHINA) CO., LTD. was the first company in Chengdu, where many manufacturers struggled to recover factory operations, to restart operations. We talked with the employees who lead the efforts to return the factory to an operational state about what that period was like.

**Li Ping (Executive Vice-GM), Li Xiangfu (Vice-GM; Factory Manager at the time), and Jing Ling (Factory Manager; Assembly Sect. Head at the time) look back on the period after the earthquake.**

### Terror of a First-Time Earthquake

—What was it like during the earthquake?

**Li Xiangfu:** I was in the office. I was just in front of the machinery parking lot, so when the earthquake occurred, at first I thought it was vibrations from the machine. But as the shaking continued, I thought, "This is odd." Once I realized it was an earthquake, I quickly ran outside. Seeing the pond water undulating from the quake made me quite scared.

**Jing:** I was in the middle of a meeting with Japanese staff when the shaking started. I had never experienced an earthquake, so I thought it was a car crash or something. When I saw the Japanese get under the desk, I just followed them, but the severe shaking of the building was terrifying. I

thought it was going to collapse. The shaking lasted a long time and seemed quite dangerous, so all the employees went outside. After it was over, no buildings were destroyed, although the outer wall was peeled away in places.

**Li Ping:** I was not in the company but rather in the hospital when the earthquake struck, but I appropriately got in contact and received a report.

### Concern for and Communication with Coworkers

—What did you do after evacuating?

**Jing:** First we met somewhere away from tall buildings to check that all employees were present and accounted for, and whether there were any injuries. We decided that the continuous aftershocks made it dangerous to move and stopped operations for the time being. We spent about two hours like that, helping and

consoling each other. During that time, management personnel gathered together to discuss the situation.

**Li Xiangfu:** Since we didn't know what conditions we were, as the telephone and Internet were both out, we created a response team right then and there, and all the other employees were sent home. There were some 30 employees that remained including the leaders of each section and department, and personnel in charge of facilities and of safety management.

—Were you able to safely provide leadership?

**Jing:** Everyone was panicked, but I think that everyone's initial response was rather spontaneous in such cases. I didn't need to tell anyone to check the safety of coworkers and similar actions because all employees started to check on each other by themselves. Next, we checked everything again while also turning off the factory gas and high-voltage power in order to prevent any secondary accidents.



From the left:  
KOBELCO CONSTRUCTION  
MACHINERY (CHINA) CO., LTD.  
Factory Manager  
**Jing Ling**  
Executive Vice-GM  
**Li Ping**  
Vice-GM  
**Li Xiangfu**

**Li Xiangfu:** There was great solidarity with everyone maintaining their composure. After returning home, employees were told to take three days off in order to take care of their homes, families, and persons close to them, while the response team worked to ascertain conditions, and dealt with matters within and outside of the company.

### Steps Towards Restarting Factory Operations

—What did the response team do?

**Li Xiangfu:** Starting from the morning following the earthquake, we checked on the damage status of our distribution agents and users in affected areas and examined all the machines we had shipped to find out if they had suffered breakdowns or other problems. This was our first priority as construction machinery in the affected areas serves as a lifeline.

**Jing:** We set up a response headquarters in the gym and stayed overnight there in shifts. As it was also used as an evacuation center, there were some 20 to 30 persons, employees and their families who were too scared to sleep in their homes, staying there at any time. We carried out night patrols from immediately after the earthquake until early June.

**Li Xiangfu:** To recover factory operations, we mainly checked the safety of the buildings, investigated the safety and functions of the factory facilities and equipment, and coordinated their operations. We worked quickly but it still took two whole days.

**Jing:** Although we wanted to restart operations as soon as possible, we had to pay particular attention to equipment ensuring quality. As it is essential to maintain quality at all times, various equipment manufacturers dispatched

personnel to our factory so that we could perform an overall inspection. It is more difficult to examine already installed equipment than when newly installing it.

### Our Mission as a Manufacturer

—Tell us your thinking about restarting factory operations from the perspective of a company director.

**Li Ping:** Construction machinery is essential for helping areas affected by an earthquake. As this earthquake happened near us, it was necessary that we restart production in order to quickly provide for the needs of people in affected areas. Assistance in affected areas was being performed by the KOBELCO CONSTRUCTION MACHINERY GROUP, so we could maximize our efforts to restart factory operations.

**Li Xiangfu:** We asked our employees to understand our responsibilities and mission as a factory member, and morale rapidly grew increasingly higher. I think the general consensus among employees was "Even just one more machine!"

**Li Ping:** Of course, the first priority in an earthquake is human life, but economic recovery is also necessary for returning to regular daily life. I believe that our mission as a manufacturer is to restart operations and restore economic activity.

**Li Xiangfu:** I was in Japan during the 1995 Kobe Earthquake. At the time, KOBE STEEL could not make some parts due to earthquake damage, so they were provided by other companies, enabling KOBE STEEL to deliver the products ordered by their clients. This was because, even if a loss is suffered, carrying out nearly normal transactions helps to keep the economy circulating in a regular manner. That also really impressed me deeply.

### Compassionate Corporate Culture

—Newly reflecting on your experiences, how do you feel about them now?



**Li Ping:** KOBELCO CONSTRUCTION MACHINERY GROUP received a commendation from the city for responding so quickly to provide assistance in the earthquake-struck areas. The employees also raised quite a large sum of money

from a donation drive they initiated themselves. I was able to really feel the cohesiveness of the KOBELCO CONSTRUCTION MACHINERY GROUP, as well as the caring environments of our company.

**Jing:** Instructions and coordination were carried out smoothly, and I feel that the rapid recovery was certainly due to the solidarity and mutual cooperation of our employees. The strengthening of unity between employees has become a great asset for us.

**Li Xiangfu:** Although I didn't directly work in providing disaster recovery, I was able to play a role in restarting factory operations. Our company helped employees and suppliers affected by the earthquake and showed great consideration and kindness for not only our employees but also related companies and local communities.

**Li Ping:** I feel that confidence in our company increased greatly not only among our employees but also from people outside of our company. We received words of gratitude from many people. Additionally, the attitude of contributing to society was greatly strengthened in our employees. The earthquake was used as an opportunity to create a CSR Committee that continues to provide assistance to universities, primary schools, and other organizations. I hope that we can achieve coexistence and mutual prosperity with the local communities as a company that is considerate of both people and society.





## Environmental Conservation Throughout the Entire Business Cycle

Through actions such as developing products boasting excellent environmental performance and measures to reduce the environmental burden of our factories, we are implementing environmental conservation measures that take into consideration the entire business cycle from product development through production, distribution, and sales.

### Aiming for Even Better Environmental Performance of Excavators

Since our founding, the KOBELCO CONSTRUCTION MACHINERY GROUP has constantly striven to develop state-of-the-art environmental technology. In addition to low fuel consumption performance that is among the best in the world, low noise generation, and the development of environmentally friendly engines that provide clean exhaust gas, our machines are equipped with our own unique advanced system that utilizes IoT to improve work efficiency and safety. KOBELCO CONSTRUCTION MACHINERY's hydraulic excavators are still continuing to evolve.

#### Minimum Transport Width of 2.99 Meters. Compact Layout Provides Excellent Transportability

### Evolution of Crane Environmental Performance

We have continuously pursued environmental performance in our cranes as well, as shown by the evolution of the Mastertech-G Series, the first in the industry equipped with numerous energy-saving functions, and the G-Mode, KOBELCO CONSTRUCTION MACHINERY's in-house developed energy saving system. The latest "TK750G" crane provides improved transportability due to its transport width (less than 3m), as well as being equipped with an engine that satisfies the 2014 exhaust gas regulations, so that this new model combines workability and durability with excellent environmental performance.

#### Equipped with an Engine Satisfying the Most Recent 2014 Exhaust Gas Regulations

The "TK750G" is a new model of the TK series, which continues to receive high praise from customers, that is mostly used for civil engineering and foundation work. Current features of the series, such as a robust structure and high lifting capability, have been retained, and the new model features a transport width of 2.99 meters to simplify trailer arrangements and application procedures. We further improved transportability with a new optional boom attachment/detachment device and self-attachment/detachment crawler device.

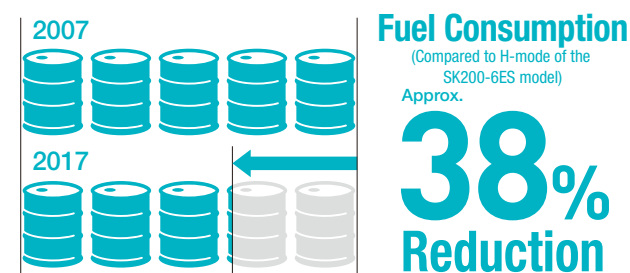
#### Excellent Durable Structure to Withstand Hard Civil Engineering and Foundation Work

The engine is equipped with an "urea SCR" that serves as an exhaust gas after-treatment device. In comparison with previous models, this engine reduces PM\*1 by approximately 80% and NOx\*2 by approximately 93% to provide clean exhaust gas and comply with strict emission regulations. Additionally, the use of low-noise engineering enables it to comply with standard values for low-noise construction machinery, and the new engine demonstrates excellent environmental performance with special attention paid to exhaust gas and noise.

\*1. PM: Particulate matter, \*2. NOx: Nitrogen oxides

#### Pursuing the Challenge of Low Fuel Consumption to Revolutionize the Industry

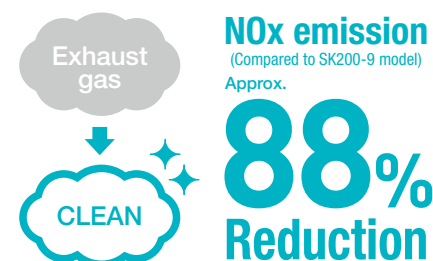
We have achieved improved fuel consumption performance in all modes in comparison with previous models by introducing a new boom/arm energy regeneration that efficiently controls the hydraulic flow and by reducing pressure loss. We have achieved an approximate 38% reduction in fuel consumption over the past 10 years.



#### Satisfies 2014 Exhaust Gas Regulations: Providing Clean Exhaust Gas

The engine exhaust system is equipped with an urea SCR\*1 system that breaks down NOx\*2 into harmless nitrogen and water. The combination of this system with exhaust gas after-treatment devices\*4 that thoroughly collect and incinerate PM\*3 provides extremely clean exhaust gas.

\*1. SCR: Selective Catalytic Reduction, \*2. NOx: Nitrogen oxides, \*3. PM: Particulate matter, \*4. Exhaust gas after-treatment devices: DPF or DOC



## TOPICS

### New Functions to Optimize Excavator Performance

#### ICT Implemented Services Greatly Improve Work Site Productivity "Horunavi"

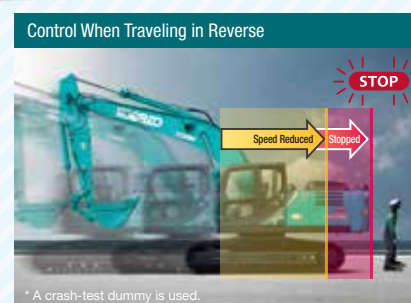
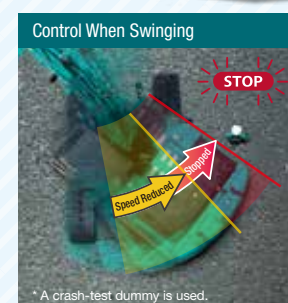


Horunavi is an ICT implemented brand combining the Japanese word "horu" (dig) with "navi" for navigation. There are 2D guidance systems that can be introduced as easily as car navigation system, and 3D guidance systems that use GNSS\* to measure the three-dimensional position and orientation of construction machinery enabling you to work with greater precision while comparing with design data. We have also added the "Horunavi + Plus", 3D machine control that allows you to perform construction work according to design drawings using only arm lever control or carry out work while preventing excessive digging against design drawings. These options provide support for improved productivity with ICT implementation according to the work site application. \* GNSS: Abbreviation for Global Navigation Satellite System, a positioning system using satellites such as GPS.

#### Collision Reduction System: First Construction Machinery Manufacturer with This New Technology "K-EYE PRO"



The "K-EYE PRO" function notifies the driver by a displayed message and alarm if a person or object is detected in the machine's blind spot when swinging or traveling in reverse, after which the machine's speed is automatically reduced or the machine is stopped. It is effective in reducing accidents involving the crushing of body parts or being run over, which account for 60% of construction site accidents.



#### KOBELCO CONSTRUCTION MACHINERY's Unique Preventive Maintenance System "KSCAN"



This system reads in data such as water and oil temperatures, fuel injection amounts, and pump output to monitor conditions by remote control using IoT. When service personnel perform maintenance, they perform a physical examination at high idling speed, and the data is promptly processed by the KOBELCO server in order to detect unnoticeable possible problems by performing a detailed analysis using the human eye and data analysis. This system functions to prevent errors so that excavators can operate stably.

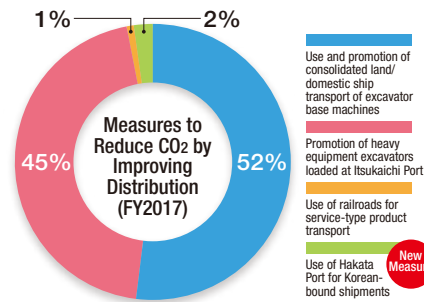


## Environmental Preservation Measures

### Reducing CO<sub>2</sub> by Improving Distribution

We are reducing the amount of CO<sub>2</sub> emission by improving our product distribution. Since the introduction of the Authorized Exporters' Program in October 2009, we have been exporting medium and large excavators manufactured in our Itsukaichi Factory from Itsukaichi Port located next to the factory. In comparison with the previous method of exporting from Kobe Port, we have greatly reduced the amount of CO<sub>2</sub> emissions generated while transporting product to the port. Additionally, in FY2017, we changed shipments of OEM-manufactured excavators from Kobe Port to the neighboring Hakata Port. This reduced the distance of product shipment by nearly half and also helped to reduce CO<sub>2</sub> emission. Actively implementing these improvements to our distribution resulted in a 9.0% improvement of emission intensity\* in comparison with FY2017.

\* Amount of energy used for transport (crude oil equivalent) / Net sales of KOBELCO CONSTRUCTION MACHINERY



### Reducing Energy Consumption

Ongoing activities to reduce energy consumption consist of measures to reduce power usage at all of our factories. One measure implemented in FY2017 at our Hiroshima Factory was to improve the loss of air used at the factory. We set a goal of reducing the air amount lost to 30% or less, and were able to achieve a reduction in power consumption of nearly 9% in comparison with the previous fiscal year by reducing working hours through work style transformation and by repairing air leaks. In FY2018, we will install air flow meter in order to affect even more detailed improvements to air loss and further reduce the amount lost. We are also planning to install ceiling-mounted LED lamps to the assembly building as we continue to convert lighting to LED for facilities at Hiroshima Factory.



### Reducing Industrial Waste

As a part of our efforts to reduce waste, we are switching from the use of cardboard for the packaging material of parts delivered by our suppliers to the use of specialized plastic pallets, to reduce the amount of disposable cardboard continuously implemented at each of our factories. We achieved an 8.3% reduction in comparison with the previous fiscal year at our Itsukaichi Factory of the Hiroshima Factory. The use of specialized pallets has been implemented through the cooperation of our business partners with the goal of further reducing the amount of disposable cardboard. We are also greatly expanding various measures to properly perform waste disposal at all factories and offices by reducing industrial waste (such as wood debris and scrap metal), general office waste, and waste oil.



## Safety and Environmental Measures in Production Processes

\* Example showing production processes at Itsukaichi Factory

**Goods Received**

**Plate Working**

**Painting**

**Assembly**

**Inspection**

**Shipping**

**White Paint for Indoors**  
Walls and floors are painted white, and the factory is designed to allow for the use of natural light to provide brightness

**No Uneven Surfaces Inside Factory**  
No uneven surfaces improves worker safety

**Assembly Line-type Painting Processes**  
Installation of assembly lines for shot blasting, under and over coats, and drying improves efficiency

**Automated Guided Vehicles (AGV)**  
Improved transport safety and optimized work efficiency

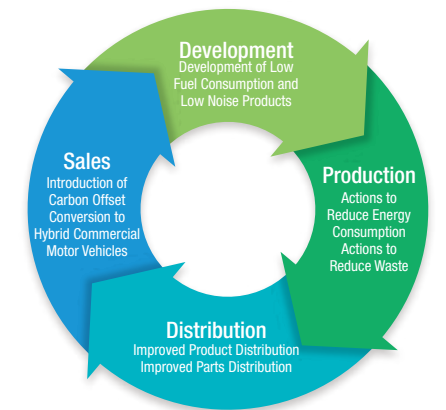
**Clean Meters to Monitor Dust Levels**  
Constantly monitor dust levels to prevent dust and other particles from entering

**Shipping from Itsukaichi Port**  
Many overseas-bound shipments are loaded at the nearby Itsukaichi Port to ship them across the globe

## Environmental Figures

### Emission Amounts Associated with Business Activities

The KOBELCO CONSTRUCTION MACHINERY GROUP is carrying out various environmental conservation activities according to the business cycle of development, production, distribution and sales. Our efforts for environmental preservation include measures at each factory to reduce CO<sub>2</sub> emission such as those to reduce energy use and waste matter, as well as production and development-related activities that focus on creating products with low fuel consumption and other improved environmental performance. The FY2017 environmental figures for our Japanese production bases are shown below.



#### Hiroshima Factory

##### Atmospheric data

Item	Facilities	Regulatory Value	(Actual) Measured Value (Max.)
NOx	Frame paint undercoat	230	28
	Frame paint finish	230	14
	ATT paint	230	8
Dust and soot	Frame paint undercoat	200	Less than 0.004
	Frame paint finish	200	Less than 0.003
	ATT paint	200	Less than 0.003
Dioxins	Not applicable	—	—

##### Water quality data

Item	Regulatory Value	(Actual) Measured Value (Max.)
COD	—	—
SS	—	—
Oil content	35	30
Dioxins	—	—

##### Chemical substances

Substance	Amount of Emissions				Amount of Transportation		Main Process/Purpose of Use, etc.
	Atmosphere	Public Water System	Soil	Reclamation inside Premises	Sewers	Other than Offices	
Xylene	120,000	0	0	0	0	30,000	Painting
Ethylbenzene	47,000	0	0	0	0	3,600	Painting
Toluene	21,000	0	0	0	0	9,400	Painting

Total substances used: 4

#### Okubo Factory

##### Atmospheric data

Item	Facilities	Regulatory Value	(Actual) Measured Value (Max.)
NOx	Not applicable	—	—
Dust and soot	Not applicable	—	—
Dioxins	Not applicable	—	—

##### Water quality data

Item	Regulatory Value	(Actual) Measured Value (Max.)
BOD	600	2,400*
SS	600	3,200*
Oil content	5	4.4
Dioxins	—	—

##### Chemical substances

Substance	Amount of Emissions				Amount of Transportation		Main Process/Purpose of Use, etc.
	Atmosphere	Public Water System	Soil	Reclamation inside Premises	Sewers	Other than Offices	
Xylene	60,000	0	0	0	0	7,800	Painting
Ethylbenzene	10,000	0	0	0	0	2,200	Painting
Toluene	54,000	0	0	0	0	16,000	Painting

Total substances used: 6

\* We have investigated the locations and causes for exceeded standard values, and are implementing measures to prevent recurrence.

#### Ogaki Factory

##### Atmospheric data

Item	Facilities	Regulatory Value	(Actual) Measured Value (Max.)
NOx	Not applicable	—	—
Dust and soot	Not applicable	—	—
Dioxins	Not applicable	—	—

##### Water quality data

Item	Regulatory Value	(Actual) Measured Value (Max.)
COD	1.65(kg/Day)	1.39
SS	40	2
Oil content	5	1
Dioxins	—	—

##### Chemical substances

Substance	Amount of Emissions				Amount of Transportation		Main Process/Purpose of Use, etc.
	Atmosphere	Public Water System	Soil	Reclamation inside Premises	Sewers	Other than Offices	
Xylene	20,000	0	0	0	0	5,000	Painting
Ethylbenzene	19,000	0	0	0	0	4,000	Painting
Toluene	16,000	0	0	0	0	3,000	Painting

Total substances used: 4

**Atmospheric data**  
\* Regulation Value: Air Pollution Control Act, prefectural regulations, and Act on Special Measures against Dioxins.  
\* Units: NOx was measured in ppm, dust and soot were measured in mg/Nm<sup>3</sup>, and dioxins were measured in ng-TEQ/Nm<sup>3</sup>.  
\* Regulation values are determined for each facility subject to the survey.  
\* The value for each of the following substances not listed above is equal to or less than the quantitative limit value (not detected) or the regulatory value. Sulfur oxide, cadmium, chlorine, hydrogen chloride, fluorine, hydrogen fluoride and silicon fluoride, lead, benzene, trichloroethylene, dioxin

**Water quality data**  
\* Regulation Value: Water Pollution Prevention Act, prefectural regulations, Act on Special Measures against Dioxins or city sewer regulations, and agreed values.  
\* Units: COD, SS, and oil content were measured in mg/l, and dioxins were measured in pg-TEQ/l.  
\* ND: Being equal to or less than the quantitative analysis limit (not detected).  
\* The value for each of the following substances not listed above is equal to or less than the quantitative limit value (not detected) or the regulatory value. pH, BOD, total nitrogen, total phosphorus, phenols, total chromium, soluble iron, soluble manganese, fluorine, copper, zinc, cadmium, total cyanogen, organic phosphorus, lead, hexavalent chromium, arsenic, total mercury, PCB, trichloroethylene, tetrachloroethylene, dichloromethane, carbon tetrachloride, 1,2-dichloroethane, 1,1-dichloroethylene, cis-1,2-dichloroethylene, 1,1,1-trichloroethylene, 1,1,2-trichloroethane, 1,3-dichloropropane, thiram, simazine, thionocarb, benzene, and selenium

**Chemical substances**  
\* Unit: kg





# Contributing to Local Communities Through Direct Interaction

As a member of local communities, our goals are to build mutual understanding and trust, as well as growing relationships. KOBELCO seeks to deepen bonds with the local communities through direct interaction with communities and their residents and contributes to the revitalization of these communities.

## Activity Philosophy

As a global company expanding our business into various countries and regions, the KOBELCO CONSTRUCTION MACHINERY GROUP is continuously carrying out community-based CSR activities in consideration of the importance of creating friendly relationships and building trust. With the aim of growth through a close relationship with local communities, KOBELCO is carrying out activities that promote interaction with local residents and provide support for their communities. A fundamental element is that the details and methods of such support activities are investigated and determined by our employees themselves who then actively participate in their implementation. These activities allow us to understand local characteristics, and what local residents are thinking and feeling while also providing opportunities for considering the role that the KOBELCO CONSTRUCTION MACHINERY GROUP must assume in society.

Additionally, when an earthquake or similar large natural disaster occurs, we contribute donations for recovery support, donate construction equipment needed at the site of the disaster, dispatch equipment operators, and other similar efforts. We are always studying what is needed and what can be done across a wide spectrum in order to carry out activities that contribute to people and society. The KOBELCO CONSTRUCTION MACHINERY GROUP has been steadily carrying out activity after activity in order to become indispensable to local communities and their members.

## CSR Fund

The CSR Fund was established in FY2006 in order for the KOBELCO CONSTRUCTION MACHINERY GROUP to support and perform activities that contribute to society, and to actively promote the continuous nature of such activities. The CSR Fund also actively supports activities that contribute not only to local communities but also to society as a whole. The fund supports a wide variety of activities from human resources development to education assistance in all parts of the world.

The selected activities are drawn from the suggestions of our employees. Activities within Japan and overseas considered as appropriate for CSR of the KOBELCO CONSTRUCTION MACHINERY GROUP, such as conserving the global environment or contributing to local communities, are provided with financial assistance to support their smooth operation and ensure their continuation.

## CSR Awards

Every year, the KOBELCO CONSTRUCTION MACHINERY GROUP gives a CSR Award to the most outstanding activity from among all the various CSR activities carried out by our offices or group companies. Numerous activities have been nominated every year since the award was first given in FY2007, with the selection for the award based on the following criteria.

- The activity demonstrates a significant contribution to CSR in areas such as the environment, local community service and human resources development.
- The activity contributes to elevating the prestige of the KOBELCO CONSTRUCTION MACHINERY GROUP and improving brand image through CSR measures.
- The activity prevents an industrial accident or other type of disaster, or it consists of life-saving activities during such accident or disaster.

The conferment of such awards serves as praise and support for the activities while also encouraging others to perform even more of these positive actions. Additionally, the award serves to spread the word about these excellent activities so that they serve as examples for other activities in the future with the aim of cultivating even more excellent activities to invigorate such CSR activities.

● For more details, visit our website.



<https://www.kobelcocm-global.com/jp/csr/>

## IMPRESSION

### Watching KOBELCO Advance



**I wanted to greatly expand activities where I heard kids said, "This lesson is fun and interesting!"**

KOBELCO CONSTRUCTION MACHINERY  
Upper Design Gr., Product Design Engineering Dept.,  
Takayuki Okunishi

The Hiroshima CSR Committee received a request from the Japan Institute of Invention and Innovation to carry out school visit science classes at primary schools on a continuing basis. Seeing children carry out experiments in such an earnest and dedicated manner makes me feel that these classes are really great opportunities to instill an interest in science in the children. The CSR Committee has been very enthusiastic in providing these classes, and the attractiveness of these activities is that they contribute to society while also being fun. We are currently planning to expand such activities to the Okubo and Ogaki Factories. In the future, we would like to expand the activities to our overseas production bases also so that they can grow into becoming common activities.

## TOPICS

### Results of Continuous Activities

#### A Wide-Ranging Circle Spreading Through All Group Companies Eco Cap Activities

Eco Cap activities have been carried out continuously throughout Japan since 2010. Collected plastic bottle caps are periodically recycled by subcontractors, local governments, and schools. In addition to helping reduce waste, profits are used for charitable causes such as purchasing vaccines for impoverished children across the globe. To date, the Group has collected a total of 397,762 plastic bottle caps (enough polio vaccine for approximately 468 children). "Start small and grow steadily," is our motto as we continue to collect plastic bottle caps.



#### Learning from Excavators! Activity to Nurture Scientific Human Resources School Visit Science Class

From 2010, we have been continuously giving a class to elementary school students every year called "Balances and Levers" that uses hydraulic excavators as the subject. We provide hands-on type classes with experiments using compact excavators and contrive similar methods to communicate the fun of science while also instilling an interest in construction machinery. In the past, these classes were carried out as a CSR activity of the Hiroshima Factory, but our goal is for them to be implemented at the Okubo and Ogaki Factories, and then throughout the entire company including overseas operation bases as a means to contribute to the development of the industry and society.



## A Wide Variety of Activities Spread Across Japan and the Globe

### List of Activities

Gifu	Hiro Gakuen: Machine sketching contest
Hiroshima	KOBELCO CONSTRUCTION MACHINERY Cup Rescue robot challenge for junior high school students
Fukuoka	Local revitalization activities with the "Go-Anywhere Squad" (Doko-den Iku Tai)
China (Chengdu)	Educational support for Qingxing Shengang Primary School
Hokkaido to Kanagawa	Local Activities in Japan
Tokyo/Chiba	School visit activities
Hyogo	Hosting of class visits to company
Hyogo	Participation in KOBELCO Rugby Festival
Hyogo	KOBELCO Forest: Forest maintenance activities
Hiroshima	ECOWAY Green Forest: Forest maintenance activities
Hiroshima	School Visit Science Class
Hiroshima	Global Science Campus (GSC)
Hiroshima	Factory visit hands-on classes
Each Factory	Local clean-up activities
Each Factory	Eco Cap activities
Each Factory	CSR booth presentation at exhibitions
China (Hangzhou)	Local Activities Overseas
China (Hangzhou)	Provide drinks to persons cleaning up rivers
China (Hangzhou)	Tree-planting activity at neighborhood kindergarten
China (Hangzhou)	Provide rice porridge to neighborhood residents at the Laba Festival (before Chinese New Year)
China (Hangzhou/Chengdu)	Local clean-up activities
Chiba	Participation in Local Community Events
Tokyo	Chiba Civil Engineering and Construction Festival / Children's Building Festival
Gifu	Shinagawa Yume Sambashi
Hyogo	Ogaki Jumangoku Festival
Hiroshima	Construction Friendship Festival
Hiroshima	Hiroshima Karakuri Innovation Exhibition
Ehime	Queen Elizabeth, Itsukaichi Port: "Omotenashi Hospitality Corps" volunteers
	Working Car Show





## INTERVIEW

Work Style Transformation of  
KOBELCO CONSTRUCTION MACHINERY GROUP

## In Pursuit of Rich and Fulfilling Life and Work Styles

## Work Style Transformation

This is the third year since the launch of our "Work Style Transformation" project aimed at improving personal happiness and our abilities as a company and maintaining our status as an attractive company. This project provides an opportunity for each employee to review their personal life and work styles, and we have started to see, little by little, the evolution towards lifestyles that contribute positively to individuals, companies, and society.

Measures related to the "Work Style Transformation", a reformation of the way we work at KOBELCO, started in 2016. We talked with Hiroyuki Hosomi, the person responsible for this project, about its aims: "Although there is the goal of working more efficiently to improve productivity, there is also the desire for employees to lead lives in which both work and private life are fully enjoyable. I think that having relaxed and feeling satisfied are of course beneficial not only to the individual but also to the company and society, and these give birth to a virtuous cycle."

The first task was to transform meetings. Rules were set that a meeting had to provide some solid results as a means to prevent pointless meetings. "Set a time limit for the meeting and always reach some conclusion. We were also strict about completing the meeting minutes right then and there." Running parallel to these were limits on working hours, and the creation and enforcement of e-mail rules. With these three main pillars, the goal was to achieve the streamlined work tasks and a reduction in working hours.

ICT is also being used. While a database system is used for document management and similar tasks, robotic processes integrated in personal computers are used to automatically perform numeric entry and other simple tasks. Although the automatic tasks that robotic processes can handle are limited, it is expected to provide massive time savings. As a result, the amount of people working on weekends and other days off has definitely decreased, and the time people leave the office has also become earlier than before. In 2017, all employees reached the goal of the "Minimum 13" campaign focused on employees taking 13 of their annual paid holidays. Hosomi was emphatic: "I feel that the amount of time for personal enrichment lessons and hobbies have increased, and employees are able to take days off and vacations at time corresponding to their own individual lifestyle. This certainly shows

that the new working styles have permeated throughout the company." KOBELCO also provides support for the effective use of increased available time. Company club activities supported mainly at factories before have been further expanded to group-wide activities. There are currently a marathon team, middle-of-the-road music club, and many more that are waiting to be certified as an official company club. What is the secret to the success at KOBELCO CONSTRUCTION MACHINERY of achieving true work style transformation, something which is often merely talked about but not actually implemented? "One is that KOBELCO is serious about it. I don't think there are many companies where the top management themselves take every opportunity to reiterate to employees to 'Rethink your working style'." The president of the company himself has ordered domestic sales companies to form labor unions. Hosomi continues. "There is one more thing. True change cannot penetrate deeply by just giving superficial encouragement at morning meetings or in company bulletins, so we discussed the matter from time to time on an individual basis." An "Interview Marathon" was held for which questionnaires were sent to all departments, then we carefully responded one by one to the various issues. Old customs were removed, frank discussions were held, and work tasks were repeatedly examined and improved. Hosomi shared his expectations for the project: "In the future, I would like to increase relations not only with employees' families but also local communities. Widening one's perspective through activities outside of work serves to heighten interest and concern for society and the local community so that employees and the company, as well as the local community can all grow together. This is the ideal situation that KOBELCO CONSTRUCTION MACHINERY is aiming to achieve." KOBELCO CONSTRUCTION MACHINERY will continue to evolve in order to create an even better society.



KOBELCO CONSTRUCTION  
MACHINERY  
Managing Executive Officer  
GM of Corporate Planning Div.  
**Hiroyuki Hosomi**

## IMPRESSION

## Watching KOBELCO Advance

Increasing Time Spent with  
Family Makes Everyday Fulfilling

KOBELCO CONSTRUCTION MACHINERY  
Manager, Corporate Planning Gr.,  
Corporate Planning & Administration Dept., Corporate Planning Div.,  
**Masanori Okamoto**

Measures such as a system for requesting overtime beforehand have greatly increased time awareness. Everyone, including myself, has been innovative with the ways in which we use our time in a manner that is efficient for the entire workplace. We are going home earlier and spending more enjoyable time with my family. My wife is also quite happy that I have more time to help around the house. I have changed into an 'early to bed, early to rise' person, and I feel that there are now many more opportunities to refresh ourselves mentally and physically.

I Want to Use Time so Skillfully that  
People Doubt I Am an Employee

KOBELCO CONSTRUCTION MACHINERY  
Manager, Legal Gr., Legal & Internal Audit Dept.,  
**Yusuke Yamauchi**

The easy use of flex time and similar measures have made for flexible work styles. I also feel that meetings have become more practical and they deal with more substantial important topics. I use my increased free time for my hobbies and improving my skills, such as jogging, going to baseball games, and obtaining various qualifications. People might be jealous, but my next goal is, when I leave work on time everyday, they ask me "Are you really working?" (Laughs).

## ● Measures of Work Style Transformation



## Limit on Total Working Hours

Overtime past 19:00 and working on weekends/holidays is prohibited in principle. Employees are recommended to use flex time to shift the work to the morning hours. All employees display a "Going home announcement card" on their desks that indicates the time one is going home to surrounding personnel so that work can be easily coordinated.



## KOBELCO-Style Meetings

A meeting is a place to "discuss" and reach a "conclusion". The length of meetings must be set and they must be held with the bare minimum of attendees. Distribution of documents and other materials must be completed before the meeting. Meeting minutes must be created during the meeting and distributed once it ends (including confirmation of conclusion).



## KOBELCO-Style E-mail

Guidelines have been created that include, "Provide a title that readily indicates the content of the mail," "Do not add an excess amount of CC recipients," and "Start with the conclusion and concisely summarize the important points." Innovations have been made so that dealing with e-mail does not require so much time.



## Interview Marathon

All departments were divided into 104 groups and each employee submitted details and issues regarding their work. These served as references for measures to improve work and eliminate the causes of obstacles to such improvement. The aim was not to achieve overall average department results, but rather to provide individual support so that no employees were left out.





## Linkages and Trust Created Through Various Support Activities

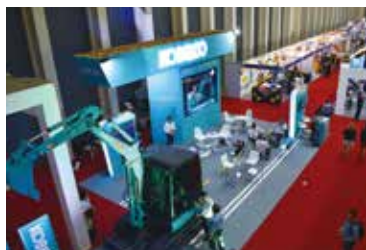
We are periodically creating opportunities for information sharing and communication with our business partners in order to work towards mutual development and expansion. We are also actively improving workplaces with consideration for diversity and work/life balance as a part of the work style transformation program.

### Harmonious Relations with Customers and Business Partners

We hold seminars and social gatherings allowing for sharing information with our customers, business partners, and related companies in order to deepen their trust. We are strengthening our linkages through mutual understanding and friendly competition with the goal of developing and expanding together.

#### Booths at Construction Machinery Exhibitions

KOBELCO CONSTRUCTION MACHINERY presents booths at various construction machinery exhibitions across the globe in order to publicize our products and technology. In March 2017, we had a booth at "CONEXPO-CON/AGG 2017" held in Las Vegas, USA, one of the world's three largest construction machinery exhibitions. KOBELCO joined "INTERMAT ASEAN 2017" held in Bangkok, Thailand in June 2017 with the exhibition of a booth by KCMSA (in cooperation with Ariya Equipment Co., Ltd., a KOBELCO distribution agent), a management company for the Southeast Asia region. This was KOBELCO's first time participating in INTERMAT ASEAN, an exhibition featuring some 300 companies from across the globe. Approximately 4,680 persons from 43 countries attended. The KOBELCO CONSTRUCTION MACHINERY's booth was based on the concept of "Compact yet tough mini" with displays of compact excavators for urban civil engineering, which are in increasing demand in Southeast Asia, and received numerous visitors from all across the globe.



#### Holding of "9th Global Service & Parts Manager Meeting"

The "9th Global Service & Parts Manager Meeting", a gathering of service and parts personnel from our local subsidiaries across the globe, was held. This meeting is held once a year in order to exchange information about sales promotion activities for services and parts, and to improve quality. The FY2017 meeting included the personnel from CS Dept. of KOBELCO CONSTRUCTION MACHINERY, as well as members from training, parts, and sales departments. There were some 50 domestic and overseas participants who engaged in lively exchanges of ideas and opinions, making this an important event for providing even better service and improving quality.

#### KOBELCO Resource Recycling Meeting

We regularly hold seminars aimed at providing a wide range of the latest information of the resource recycling industries to persons working in those industries within Japan. The "2017 KOBELCO Resource Recycling Meeting" was the 14th to be held and featured presentations about products, specialized attachments, customization, and similar items related to construction, metal, and waste recycling machines. Journalist Yoshiko Sakurai was also invited to give a commemorative speech. Many attendees this year used this event as an opportunity to gather information and interact socially, and praised the positive nature of this event.



#### Production Liaison Conference

We hold a production liaison conference every year with companies that work with the KOBELCO CONSTRUCTION MACHINERY GROUP such as our partner companies that supply us with parts. The FY2017 conference saw the participation of 357 persons from 160 companies. It serves to deepen understanding in regards to topics such the current business environment of the construction machinery industry and demand trends, as well as measures related to KOBELCO CONSTRUCTION MACHINERY GROUP's Medium-Term Management Plan and similar topics. The conference was followed by the social gatherings, providing a space for friendly social interaction with management personnel of the KOBELCO CONSTRUCTION MACHINERY GROUP, making it a great opportunity for the candid exchange of ideas.



## Workplace and Personnel Development

We are making efforts to achieve a work/life balance so that our employees can feel a sense of fulfillment in their work while also being fully active in their family and community, and we are actively striving to promote diversity and enact similar measures to respond to the changes in the world at large. We are also trying to create comfortable workplaces and develop capable human resources in order to achieve work style transformation.

### Work Style Transformation

"Work Style Reform" measures are being implemented throughout the entire KOBELCO STEEL GROUP in order to fully enhance the work and life of each individual employee. The KOBELCO CONSTRUCTION MACHINERY GROUP is actively developing and expanding "Work Style Innovation Activities" in order to improve "Individual happiness" and "Corporate happiness" by limiting working hours and making work tasks more sophisticated. These activities center around the following four main efforts: (1) Decreased time (Limitations on total hours spent working) (2) Meetings in the KOBELCO style (3) E-mail in the KOBELCO style (4) Reform of work tasks. Specific activities related to these main objectives consist of changing to early-morning shifts, streamlining meetings by implementing smart meetings, making employees aware of and follow the rules of KOBELCO-style e-mail, and assigning personnel to implement reform and improvement of work tasks. We are improving our systems and organizational structure by pursuing new lifestyles and work styles that conform to modern society, and continuously performing and promoting these activities.

### Promoting Diversity

Measures during FY2017 included an addition to our standard of conduct, prohibiting discrimination against LGBT personnel. In addition to this declaration, activities have been carried out to deepen understanding through training, given the importance of everyone correctly understanding LGBT personnel and issues. For female employees, we also started KW☆PJ (KOBELCO's Women's Kira Kira Shining Project) with the goal of women themselves creating an environment in which women can continue working, want to work, and can play an active role. As working time is an important element in promoting the active participation of women in the workplace, many opinions regarding measures that are hoped the company will implement and improving individual efficiency were collected for the work style transformation activities being carried out in the company. These are being used to create an environment allowing women to actively participate in an easy manner.



### Human Resources Development

#### Global Human Resources Development

Amidst the ever-accelerating globalization of business, KOBELCO is efficiently and constantly making efforts to develop human resources with the capabilities needed to have an active role in our global business operations, and to take on and defeat our global competition. We are carrying out training to instill the required knowledge and skills such as the obvious language abilities as well as an understanding of foreign cultures and communication skills, while also continuing to implement efforts to develop global human resources with both off and on-the-job training such as providing opportunities for accruing practical experience by being posted abroad from a young age.

■ Human Resources Development by Behavioral Abilities Diagnosis and Level Based on the concept that all results related to work are produced by one's behavior, we have created and implemented a human resources development system centered on "behavioral abilities". By periodically measuring individual behavioral abilities, we can ascertain results in an objective manner. Additionally, we have defined ideal images of each job position level in order to specify ranked goals and provide training so that employees can obtain the needed abilities and skills. We are enhancing our human resources development in order for our employees to rapidly gain the abilities needed to serve on the front lines of our business operations.

#### Our Training System

Directors	Top Management Training			
Management	Leader Training	OJT (On-the-job Training)	Distance Learning	e-learning Training
	Development of Business Leader Candidates			
	Assistant Advisor Training			
	Management School			
	Counselor 3rd-Year Training			
	New Management Staff Training			
Mid-Career Employees	Instruction Staff 1st Class Training	Language Training	e-learning Training	Distance Learning
	Instruction Staff 2nd Class Training			
	Problem Formation Training			
Young to Mid-Career Employees	Fifth-Year Employee Training	Enhanced Study of Basic Knowledge	Distance Learning	e-learning Training
	Fourth-Year Employee Training			
Young Employees	Third-Year Employee Training	Enhanced Study of Basic Knowledge	Distance Learning	e-learning Training
	Second-Year Employee Training			
New Employees	New Employee Training (Improving fundamental abilities, certifications/qualifications, etc.)	Enhanced Study of Basic Knowledge	Distance Learning	e-learning Training

## IMPRESSION

### Watching KOBELCO Advance



#### Workplaces Enabling Personal Work Styles

Interior Design Gr.,  
Product Design Engineering Dept.,  
Design & Development Engineering Div., GEC  
**Miki Kai**

In my previous job, I tried, in a somewhat forced manner, to adjust my working style to match the pace of persons working around me, but since at KOBELCO CONSTRUCTION MACHINERY we have been recommended to resolve issues related to forced or wasteful actions, I have changed my awareness of my working style accordingly. In the future, I would like to continue to transform my work style to better suit me as I search for improvements to the environment and work efficiency.



#### Improved Quality due to Improvements from a Woman's Perspective

Manufacturing Sec.,  
Ogaki Factory, Production Div.  
**Ikuho Nakagawa**

As an assembly line inspector, I inspect the specification drawings, appearance of, and similar conditions of compact excavators. An idea of ours that was adopted was to indicate inspection content in numeric values, etc. to provide an objective approach to inspection. This improved quality by decreasing the work flaws in prior processes. I would like to continue to work to maintain the high quality of our products and for women to continue to play an active role in the workplace.



#### Providing Safety and Security All Across the World

Engineering Management Gr.  
(Okubo Office)  
**Xiao Ziheng**

I investigate and check laws and regulations in order to ensure that our products comply with the rules of each country. Although, for this reason, I am having to grapple with Japanese, English, and Chinese on a daily basis, I feel very happy to be useful in improving confidence in our products. I am not yet very knowledgeable or experienced, but I would like to continue to challenge myself to provide safety and security across the globe.



## Compliance

At the KOBELCO CONSTRUCTION MACHINERY GROUP, we are working to improve compliance as a basic standard of conduct for "Persons" exceeding all differences. We have established a framework for corporate governance in order to fulfill the social roles and responsibilities of a company, and to perform sound and efficient management in a fair manner. In order to achieve compliance, we believe that it is necessary to create an environment in which everyone from directors to regular employees are constantly aware of compliance and act accordingly. To that end, we have created new a framework, are carrying out training, and performing other actions to improve the awareness of compliance issues. We have achieved thorough compliance through a variety of measures.

### Compliance Initiatives

Based on the idea that a major precondition for corporate activities is "Strict adherence to compliance", we perform our daily work tasks with an awareness of the precedence of judgment criteria and behavior standards.

No matter the judgment or action, employees must always ask themselves, "Can I be proud of myself for having made judgment or performed an action that is sincere and with ethically based honesty?" We have been continuously providing employee education and training so that they will make judgments and act properly according to compliance rules.

In recent years especially, we have not only been carrying out activities to promote "KOBELCO CONSTRUCTION MACHINERY GROUP's Compliance" within Japan but are also actively carrying these out at overseas group companies. To carry out these activities, we are encouraging an awareness of compliance, while also further developing and expanding these activities to match local conditions with an understanding of differences in areas such as the law, social customs, and practices.



Training in Indonesia (October 2017)

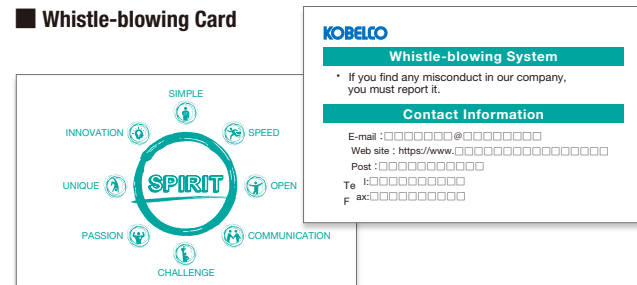
### Measure to Strengthen Compliance Overseas

### Whistle-blowing System

The KOBELCO CONSTRUCTION MACHINERY GROUP is not only carrying out compliance education and training for overseas group companies, but we have also been introducing a whistle-blowing system as one measure to strengthen our compliance structure. Introduction of this system was completed during FY2017 for China and Southeast Asia countries, such as Thailand, Indonesia, Malaysia, Vietnam, and Singapore. This year we are planning to introduce the system in India and the US

Introduction of this system for group companies in Japan has already been completed, and although it is a well-known whistle-blowing system, there are still some countries where such systems are not well known. The goal of the Compliance Planning & Administration Group of the Legal & Internal Audit Department is not simply the introduction of the whistle-blowing system, but rather to provide continuous support for all of our overseas subsidiaries so that the whistle-blowing system functions appropriately in each country. For Southeast Asia, whistle-blowing cards, the size of a personal business card, have been distributed to employees with the contact information for whistle-blowing printed on them in order to make it easier for them to use the whistle-blowing system.

#### Whistle-blowing Card



### Security Export Control Training

As one activity to strengthen compliance of our overseas group companies, the Compliance Planning & Administration Group is implementing measures for security export control. In FY2017, security export control training was provided for our local subsidiaries operating in the United Arab Emirates and China where there are concerns regarding security export control. This fiscal year, we are planning to increase awareness of security export control through workshops in factories of the KOBELCO CONSTRUCTION MACHINERY GROUP in Thailand and the US.

#### Check Points for Security Export Control

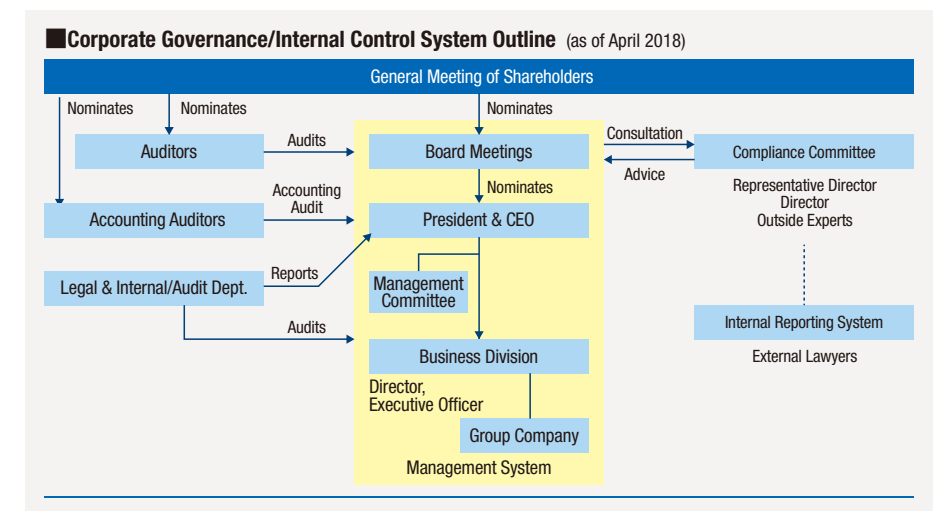


## Corporate Governance

We have established a framework for corporate governance in order to fulfill the social roles and responsibilities of a company, and to perform healthy and efficient management in a fair manner.

### Corporate Governance Structure

The KOBELCO CONSTRUCTION MACHINERY GROUP has established a corporate governance structure in order to realize fair and efficient management with even greater transparency so as to increase corporate value, and to achieve rapid and appropriate decision-making in regard to business operations. Additionally, we have established an "Internal Reporting System" (a counseling service staffed by external lawyers) as a system for facilitating the cleaning up of problematic areas within the company, and maintaining a healthy and sound business culture. This is a part of our efforts to rapidly and objectively ascertain facts and causes to implement reasonable countermeasures without any delay when any impropriety occurs.



## Outline of KOBELCO CONSTRUCTION MACHINERY GROUP

### Company Outline

**Company Name:**  
KOBELCO CONSTRUCTION MACHINERY CO., LTD.  
**Founded:**  
October 1, 1999  
**Addresses of Offices:**  
Tokyo Headquarters:  
5-5-15 Kitashinagawa, Shinagawa-ku, Tokyo  
(5th floor, Osaki Bright Core Bldg.) Phone: +81-3-5789-2111  
Hiroshima Headquarters / Hiroshima Factory:  
2-2-1 Itsukaichiko, Saeki-ku, Hiroshima-shi, Hiroshima  
Phone: +81-82-943-5321  
**URL:**  
KOBELCO Global Website: <https://www.kobelcocm-global.com>  
KOBELCO Japan Website: <https://www.kobelco-kenki.co.jp>  
**Capital:**  
16 billion yen  
**Shareholder Distribution:**  
100% held by KOBE STEEL., LTD.  
**Representative:**  
President & CEO: Kazuhide Naraki  
**Business Operations:**  
Manufacture, sales and service of construction and transport machinery  
**Number of Employees:**  
1,715 (Group total: 6,864) [As of end of March 2017]

### Leading Japanese Subsidiaries

KOBELCO CONSTRUCTION MACHINERY (EAST JAPAN) CO., LTD.  
KOBELCO CONSTRUCTION MACHINERY (WEST JAPAN) CO., LTD.  
KOBELCO CONSTRUCTION MACHINERY ENGINEERING CO., LTD.  
KOBELCO CONSTRUCTION MACHINERY INTERNATIONAL TRADING CO., LTD.  
KOBELCO TRAINING SERVICE CO., LTD., SASAINAKAMURA CO., LTD., JONAN CO., LTD.  
TOYOSUGIUE CO., LTD., Y'S YOSHIHARA CO., LTD.

### Overseas Subsidiaries

KOBELCO CONSTRUCTION MACHINERY (CHINA) CO., LTD.  
CHENGDU KOBELCO CONSTRUCTION MACHINERY FINANCIAL LEASING LTD. (China)  
KOBELCO PRECISION MACHINERY HANGZHOU CO., LTD. (China)  
KOBELCO CRANES SHANGHAI CO., LTD. (China)  
KOBELCO CONSTRUCTION MACHINERY SOUTHEAST ASIA CO., LTD. (Thailand)  
KOBELCO INTERNATIONAL (S) CO., PTE. LTD. (Singapore)  
RICON PRIVATE LIMITED (Singapore)  
PT. DAYA KOBELCO CONSTRUCTION MACHINERY INDONESIA (Indonesia)  
KOBELCO CONSTRUCTION MACHINERY MALAYSIA SDN. BHD. (Malaysia)  
KOBELCO CONSTRUCTION MACHINERY VIETNAM CO., LTD. (Vietnam)  
KOBELCO CONSTRUCTION EQUIPMENT INDIA PVT. LTD. (India)  
KOBELCO CRANES INDIA PVT. LTD. (India)  
KOBELCO CONSTRUCTION MACHINERY AUSTRALIA PTY. LTD. (Australia)  
KOBELCO CONSTRUCTION MACHINERY MIDDLE EAST & AFRICA FZCO. (UAE)  
KOBELCO CONSTRUCTION MACHINERY U.S.A. INC. (USA)  
KOBELCO CONSTRUCTION MACHINERY EUROPE B.V. (Netherlands)  
KOBELCO CRANES EUROPE LTD. (England)

### Editorial Notes

KOBELCO CONSTRUCTION MACHINERY  
CSR Promotion Group  
General Administration Dept.

### We would like you to see the ways our company has grown and developed through various activities performed within and outside of our company

This "Social Environmental Report 2018" was created under the theme of "Growing together with people and society" by collecting the opinions of numerous persons working within the KOBELCO CONSTRUCTION MACHINERY GROUP. Our goal of editing them here is to provide a sense of achievement and growth through our continued efforts. The company president discusses our business activities in the "Message from the President" and there is a feature on our ongoing internal work style transformation. This transformation, started in 2016, consists of measures for creating an environment where all employees can work challenging yet rewarding jobs in which they perform meaningful tasks, and this report features interviews with the main supervisor of this program as well as other employees. We also take a look back at the recovery activities in the 10th year since support activities started after the Great Sichuan Earthquake, a milestone in our efforts. We plan to widen the circle of our activities, both business and CSR, as we continue to enhance our current activities with the aim of creating a relationship that allows us to grow together with members of the local communities where we do business and to become a company that is indispensable to those communities.