

*CSR & Financial  
Report 2018*

for all stakeholders

# Reliable solutions

Reliable solutions.  
This corporate statement embodies the Hitachi Construction Machinery Group's vision for success.

We are committed to exceeding customer expectations by continually delivering solutions that create value for customers by packaging together our products and services in a way that solves the challenges our customers and society face.

## Editorial Policy

From fiscal 2011, we consolidated our Annual Report, which reported our management strategy and financial statements, and our CSR Report, which reported Environment, Social, and Governance (ESG) information, to produce a comprehensive CSR & Financial Report. We did this to provide a clear overall view of the activities of the Hitachi Construction Machinery Group as it aims at the integrated advancement of our growth strategies and CSR management as a corporate group. In this FY 2018 CSR & Financial Report, we have highlighted the areas described below to allow our stakeholders to gain a clearer understanding of the Hitachi Construction Machinery Group's corporate management.

**\* Concerning predictions, forecasts, and plans for the future**  
This report contains not only factual information about the HCM Group's past and present, but also predictions, forecasts, and plans for the future. The information contained in these predictions, forecasts, and plans was determined based on assumptions made at the time this report was compiled and printed, and may include uncertainties. As such, while it is possible that the results or events of future business activities might differ from the information written in this report, the HCM Group takes no responsibility for those situations. We hope the readers of this report will be cognizant of this point.

**Reporting Period**  
April 1, 2017 - March 31, 2018  
(Some of the information included is from after April 1, 2018.)

**Reporting Organizations**  
Consolidated subsidiaries of the HCM Group  
Scope of performance data  
Financial Report:  
Consolidated subsidiaries and affiliates of the HCM Group  
Non-financial Report (Environment):  
Hitachi Construction Machinery Co., Ltd. and its consolidated subsidiaries  
Non-financial Report (Society):  
Hitachi Construction Machinery Co., Ltd. and some of its consolidated subsidiaries and affiliates

**Guidelines used for reference**  
This report and HCM's corporate website "Environment / CSR" are prepared following the Core option of the Global Reporting Initiative (GRI) Standards.

**Next scheduled release**  
Scheduled for release in June 2019

## HCM's Disclosure Media



**CSR & Financial Report**  
This report comprehensively covers the HCM Group's management strategy as well as financial and non-financial (ESG) information.



**Corporate Governance Report**  
This report provides information about the HCM Group's basic approach to corporate governance and capital structure, among other topics.



**TIERRA+ (magazine)**  
This seasonal magazine is published to educate stakeholders about the HCM Group's activities both inside and outside Japan.



**Information for shareholders and investors** (corporate website)  
<https://www.hitachicm.com/global/investor-relations/>  
HCM's corporate website publishes earnings information and IR news in a timely manner and features information for individual investors along with various IR documents.



**CSR activities** (corporate website)  
<https://www.hitachicm.com/global/environment-csr/csr-en/>  
HCM's corporate website features activities not appearing in this report along with more comprehensive performance data.



**Environmental activities** (corporate website)  
<https://www.hitachicm.com/global/environment-csr/environmental-activities/>  
HCM's corporate website provides in-depth information about its environmental management system and various information on environmental performance.

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## HCM's Approach to the Sustainable Development Goals (SDGs) P9



The HCM Group incorporates the SDGs into its management strategy and actively engages in CSR activities with the achievement of a sustainable society one of management's top priorities.

## Solution Linkage P25



We deliver ICT/IoT-based solutions that help to improve safety, improve productivity, and reduce life cycle costs together with customers.

## Hybrid Hydraulic Excavators P32



We help to reduce environmental impacts through the development of new models of hybrid hydraulic excavators with much greater fuel economy than conventional models.

## Autonomous Haulage System for Dump Trucks P36



We are pushing ahead with initiatives for the commercialization of an autonomous haulage system (AHS) for dump trucks that improves site safety and increases productivity.

## Utilization of ICT Demo Site P37



We opened our second ICT Demonstration Site in Kagawa Prefecture. We are now working to raise awareness about the Ministry of Land, Infrastructure, Transport and Tourism's i-Construction initiative and further popularize and develop ICT Construction solutions.

## Contributing to Community Development P39



We are contributing to community development in a number of countries from various perspectives, including our activities in Cambodia that began in 2007.

## Enhancing Technical Capabilities Globally P44



We are improving technical capabilities at our sites around the world through such initiatives as the Hitachi Construction Machinery Group International Skills Competition.

## Initiatives for Work Style Reform P46



We are working to create workplaces where employees can continue working with enthusiasm and drive. This includes making work styles more flexible and reducing overwork.

## CSR Management in the Supply Chain P52



We are promoting CSR activities across the entire supply chain, including at suppliers, so that we can fulfill our responsibilities to the international community.



## Our Goals

Construction machinery is truly indispensable for the construction of social infrastructure and development of industries. Our creation of construction machinery that deliver high quality, performance and reliability plays a key role in society's development. Under its shared global vision, the HCM Group is working on value creation to maximize business value together with environmental and social value for everyone who is part of the society we aim to achieve.

### ■ The HCM Group's Philosophy

## Hitachi Construction Machinery's Vision

**"Toward the richness of Earth and prosperous communities in the future..."**

Hitachi Construction Machinery is contributing to the creation of comfortable living spaces.



## HCM Group Codes of Conduct

[Harmony] [Sincerity] [Pioneering Spirit]

Our corporate vision embodies the HCM Group's vision for success. To achieve this, we have established the corporate statement "Reliable solutions" and the "Kenkijin Spirit," which codifies the shared values and code of conduct for HCM Group employees. The Hitachi Construction Machinery Group Codes of Conduct forms the foundation for all of these. The code contains guidelines that the HCM Group must abide by as a good corporate citizen, able to quickly and correctly identify the needs of society which are constantly changing.

## Main Products and Services

The HCM Group offers a truly broad range of products and services, from construction machinery with world leading performance and quality to services supporting customers' businesses. Through our products and services we are helping to achieve a sustainable society.

### Mining machinery



Ultra-large hydraulic excavators



Rigid dump trucks

### Construction machinery



Wheeled hydraulic excavators



Road machines



Wheel loaders



Hydraulic excavators including hybrid and ICT hydraulic excavators



Applied products



Mini excavators

### Solutions



Safe operation support solutions for mines



"ConSite" service solutions powered by ICT

**HE PARTS**  
INTERNATIONAL



Providing after-sales parts development, manufacturing, sales and service solutions for mining facilities and equipment

## Integrating Management Strategy and Sustainability

The world today continues to face myriad social and environmental issues that remain unresolved. These include worsening global warming, water shortages and growing economic disparities caused by globalization. Given this, companies are expected to play an even greater role in building a sustainable society.

In September 2015, the United Nations adopted the Sustainable Development Goals (SDGs\*), which represent a common set of targets for the international community to achieve by 2030. The SDGs call for companies to be one of the key actors in achieving the 17 goals and 169 targets.

The HCM Group believes its own businesses play an important role in attaining the SDGs. We will continue to exert our best efforts to attain the SDGs while cooperating with customers, suppliers and partners in various aspects, including the provision of products and services centered on construction machinery.

In recent years, the investment community, too, now re-

quires companies to think from a long-term and sustainable perspective. The HCM Group views CSR as a method of sustainable development that companies can employ to enhance their corporate value in the medium to long term, by helping to resolve social issues through their core operations and has established medium- to long-term CSR goals. Based on this approach, we will pursue both corporate value and social value simultaneously with the goal of building a sustainable society.

\* SDGs (Sustainable Development Goals):

A continuation and development of the Millennium Development Goals (MDGs) whose deadline was in 2015, adopted by the United Nations General Assembly in September of 2015 as The 2030 Agenda for Sustainable Development. These are specific guidelines for action for advanced and developing countries that stipulate responsibility for poverty, famine, discrimination, climate change, and biodiversity.

### CSR roadmap

The HCM Group aims to achieve sustainable growth and enhance its corporate value by integrating CSR measures with management strategies to thereby contribute to solving social issues through core business operations.

Realizing the sustainable society that the HCM group aspires to come true

### 2030 CSV\* GOAL

#### Corporate target

Curb CO<sub>2</sub> emissions via products: Reduce by  
▲ 33%

#### Target for solutions

Improve safety and productivity, reduce life cycle cost

\*(Creating Shared Value (CSV):  
An approach to management that seeks to create both social value and economic value.

#### Identifying Materiality\*

- Establish framework to integrate CSR into management strategies
- Create 8 key CSR initiative themes

\* Materiality:  
Issues that could potentially have substantial impact on an organization's performance

At present Creating medium/long-term goals

Previous mid-term management plan  
FY2014 - FY2016 "GROW TOGETHER 2016"

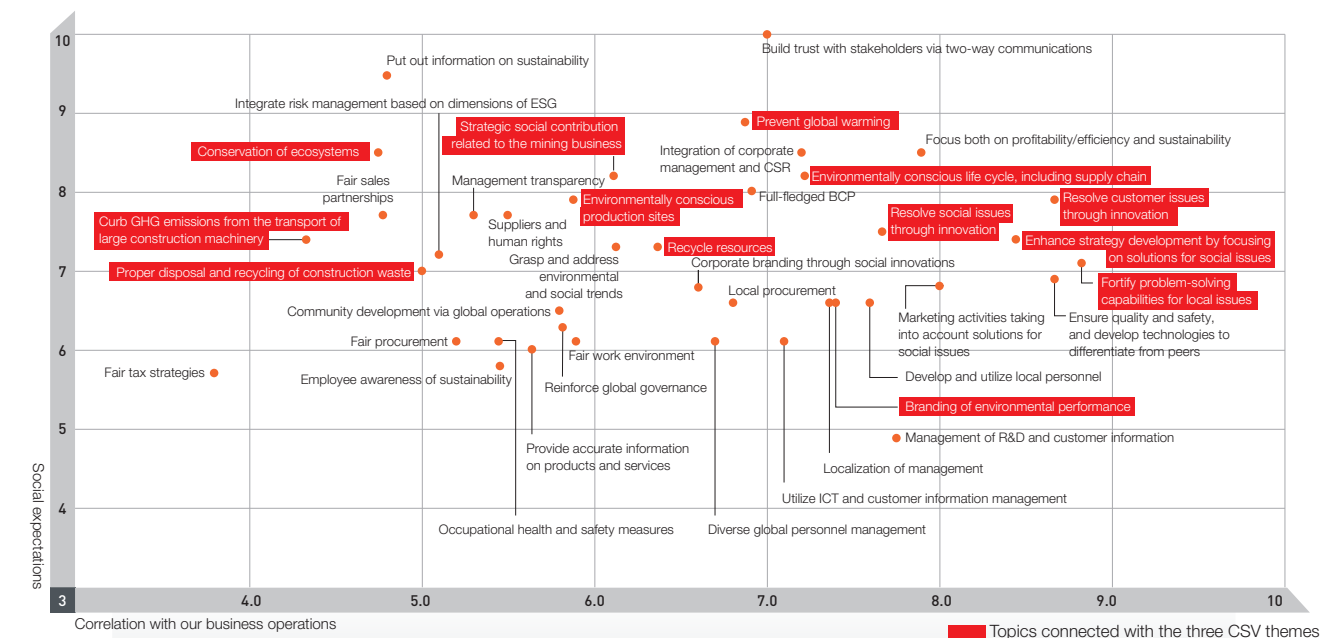
Current mid-term management plan  
FY2017 - FY2019 "CONNECT TOGETHER 2019"

## Sustainability Issues and Key Initiative Themes

In FY2015, the HCM Group, along with outside experts and other external stakeholders, analyzed key CSR themes as a step toward achieving its goal for further growth. Taking into account recent trends in the global society at the time, we pinpointed 40 social issues, which we believed had a strong correlation with our business operations. We mapped out these issues and

assessed them based using two parameters; their significance to HCM Group businesses and the expectations the public has of the HCM Group. From this we were able to define eight CSR initiative themes that factored in the opportunities and risks of each issue.

### Mapping of materiality topics examined and identified by the HCM Group



After creating a materiality map, we systematically reviewed each topic and came up with eight key initiative themes. Those matters of particular importance are positioned as CSV themes, which aim to link business growth with the solving of social issues. The other topics which are essential to implementing CSV themes were positioned as basic themes.

### 8 Key Initiative Themes

#### 3 CSV themes

Three themes having high social expectations and a high level of correlation with our business operations

Resolving global environmental issues

Enhancing initiatives to increase social infrastructure workforce

Contributing to community development

#### 5 base themes

Five themes that provide the foundation for our three CSV themes

Pursuing safe, effective, and sophisticated products and working environments

Occupational safety, work style reform

Developing human resources globally and locally

Creating better business transactions and value chains

Governance

## Our approach towards SDGs

At the United Nations Sustainable Development Summit 2015, held in September, more than 150 UN member nations agreed on universal sustainable development goals.

Undertaking SDGs is not only a way to improve corporate value but a valid approach to strengthen stakeholder relations. Moreover, each SDG has an extremely close affinity to the HCM Group's eight key initiative themes. Therefore, the HCM Group has scrutinized the relationship between its corporate activities and the SDGs to take action as part of its sustainable growth strategy capitalizing on its own strengths.



### Process for setting medium/long-term goals



### The Sustainable Development Goals

Goal 1	End poverty in all its forms everywhere
Goal 2	End hunger, achieve food security and improved nutrition and promote sustainable agriculture
Goal 3	Ensure healthy lives and promote well-being for all at all ages
Goal 4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
Goal 5	Achieve gender equality and empower all women and girls
Goal 6	Ensure availability and sustainable management of water and sanitation for all
Goal 7	Ensure access to affordable, reliable, sustainable and modern energy for all
Goal 8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
Goal 9	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
Goal 10	Reduce inequality within and among countries
Goal 11	Make cities and human settlements inclusive, safe, resilient and sustainable
Goal 12	Ensure sustainable consumption and production patterns
Goal 13	Take urgent action to combat climate change and its impacts
Goal 14	Conserve and sustainably use the oceans, seas and marine resources for sustainable development
Goal 15	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
Goal 16	Promote peaceful and inclusive societies for sustainable development provide access to justice for all and build effective, accountable and inclusive institutions at all levels
Goal 17	Strengthen the means of implementation and revitalize the global partnership for sustainable development

## Key issues in the value chain

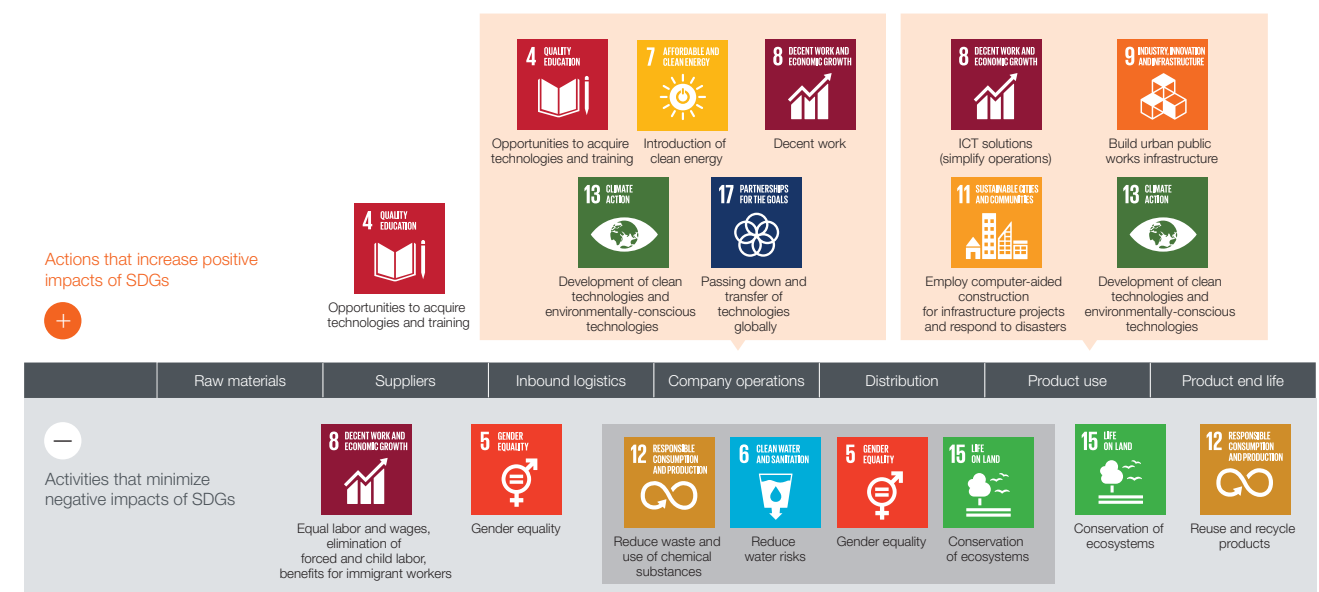
Construction machinery manufactured by the HCM Group is used in a variety of situations in society. This includes resource development at mines, development of social infrastructures, and in the agriculture, forestry, and livestock industries. It is now important that we clarify the correlation with sustainability issues throughout the value chain from the production and transport of construction machinery to their disposal, and not simply during use.

We assess the impact of our business operations to the

environment and society throughout the entire value chain by grasping an understanding of areas of impact, and analyzing the corresponding sustainable development goals and targets, and clarifying what initiatives are necessary for the group.

We plan to disclose information on the progress we are making towards SDGs in our value chain. We also aim to implement activities to achieve these goals while cooperating with various stakeholders.

### Mapping the SDGs against the value chain



\* The value chain categories above are the same in the SDG Compass recommended in the UN Global Compact

### The SDGs strongly connected with our CSV themes

CSV theme 1 Resolving global environmental issues	CSV theme 2 Enhancing initiatives to increase social infrastructure workforce	CSV theme 3 Contributing to community development
<b>13 CLIMATE ACTION</b> Global greenhouse gas (GHG) emissions are trending upward. At present, the amounts of GHG emissions are increasing by more than 50% in comparison to levels in 1990*. We aim to address global climate change by working with suppliers and customers to develop more sophisticated environmentally-conscious products and activities to reduce environmental impact.	<b>9 INDUSTRY INNOVATION AND INFRASTRUCTURE</b> Technological advances are important for findings sustainable solutions to issues from both an economic and environmental standpoint. This includes providing new employment opportunities and improving energy efficiency. The construction machinery knowhow and technologies we have cultivated since the founding of our company are closely tied in with the creation of a foundation (base) for industry and technological innovations.	<b>8 DECENT WORK AND ECONOMIC GROWTH</b> The purpose of the SDGs is to attain decent work that is worthwhile and full and productive employment for all men and women by 2030. To this end, we aim to support local hiring and development through our construction machinery business by accurately grasping the needs of the local community.
	<b>11 SUSTAINABLE CITIES AND COMMUNITIES</b> The sharp growth of cities in emerging economies presents a variety of issues, including the lack of engineers to support the social infrastructure. We aim to contribute to sustainable urban development in both emerging and advanced economies, mainly through energy-saving technologies and solutions for optimizing operations in the frontlines.	<b>17 PARTNERSHIPS FOR THE GOALS</b> We need to revitalize our global partnerships to achieve the UN's sustainable development goals and targets. We aim to further strengthen collaborations with external organizations by leveraging the comprehensive capabilities of the Hitachi Group, to undertake initiatives for the realization of a sustainable society.

\* Source: United Nations Development Programme website



# History of Value Creation

HCM's roots can be traced back to 1950 when Hitachi, Ltd. began the full-scale supply of mechanical excavators to markets. Later, HCM was spun off from Hitachi, Ltd. As an independent company, we worked toward the evolution of construction machinery based on our leading technical capabilities. HCM also established a global service system so that customers can operate their machinery in the best possible condition.

## Hitachi Founding Spirit

**Harmony**  
The willingness to respect the opinions of others and discuss matters in a manner that is thorough and frank, but fair and impartial, and once a conclusion has been reached, to cooperate and work together to achieve a common goal.

**Sincerity**  
To act with a sense of ownership and honesty at all times and never pass the buck. The spirit to meet society's expectations and generate credibility for Hitachi.

**Pioneering Spirit**  
To work creatively, using novel approaches to enter new areas. To always act as a pioneer within our areas of expertise and to have the passion to pursue higher goals beyond our capabilities.



Hitachi founder  
Namihei Odaira

History Behind HCM's Establishment	
1910	Establishment of Hitachi, Ltd.
1955	Establishment of Hitachi Construction Machinery Co., Ltd. (service company)
1956	Changed name of Mining Equipment Section to Construction Equipment Section
1962	Establishment of Hitachi Construction Machinery sales companies throughout Japan (Osaka, Tokyo, Kyushu, Tohoku, Chubu, Hokkaido)
1965	Establishment of (former) Hitachi Construction Machinery Co., Ltd. (consolidation of sales and services)
1969	Establishment of Hitachi Construction Machinery Co., Ltd. (manufacturing company)
1970	Establishment of Hitachi Construction Machinery Co., Ltd. (consolidation of manufacturing, sales and services)

## 1950

Expanded full-fledged machinery works and contributed to development of post-war Japan



We developed the U05 cable-operated power shovel in 1949, given growing demand for the economical rationale and shorter lead times of river, road and other infrastructure projects after the initial wave of post-war upheaval. We commenced mass production of the U06, a successor model, and launched sales in Japan in 1950. (Pictured: "U05")

## 1965

Development and release of the Hitachi UH03, the first hydraulic excavator developed exclusively with Japanese technology



With foreign companies actively entering the market, we developed the first hydraulic excavator made exclusively with Japanese technologies. This successfully and greatly expanded the scope for mechanized works and in 1973 demand for hydraulic excavators exceeded 20,000 units. As a result, these machines were rapidly popularized.

## 1970

Consolidation of manufacturing, sales and services  
Establishment of Hitachi Construction Machinery Co. Ltd.



Hitachi Construction Machinery Co., Ltd. was established through amalgamation of Hitachi Construction Machinery Co., Ltd. (manufacturing company) and (former) Hitachi Construction Machinery Co., Ltd., which focused on construction machinery sales and services. The new company was capable of providing integrated services from manufacturing to sales and services.

## 2000

World's first satellite communication kit equipped machinery  
Release of the ZAXIS series of hydraulic excavators



We were the first in the industry to offer an optional satellite communication system for the ZAXIS series of hydraulic excavators. This made us the first to offer the future of information functions as an information-driven e-excavator that can obtain operating information remotely.

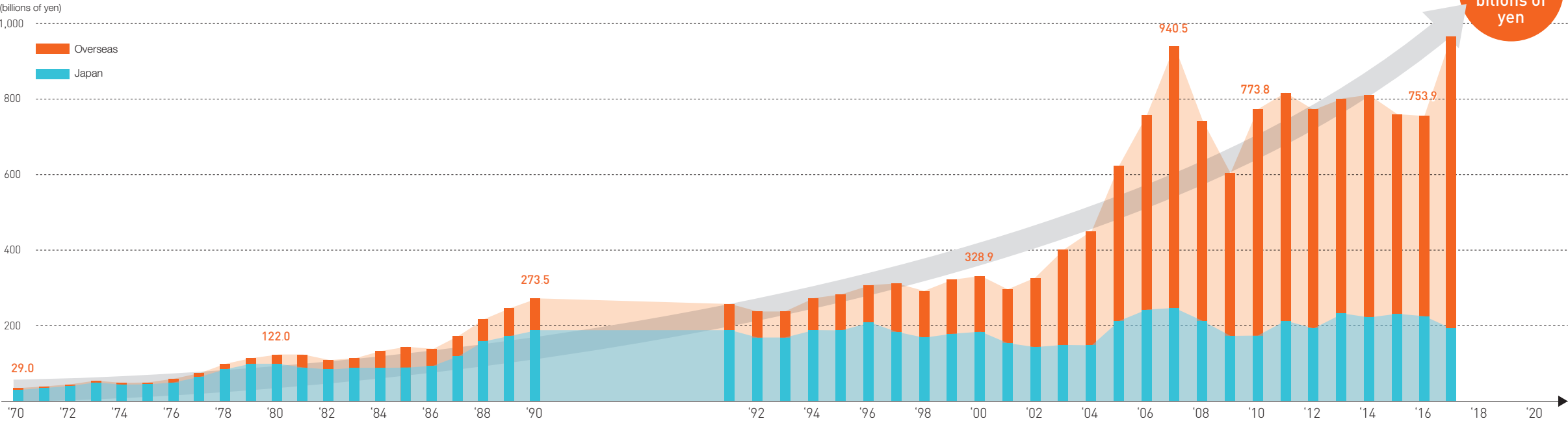
## 2013

Service solutions  
Launch of ConSite in Japan



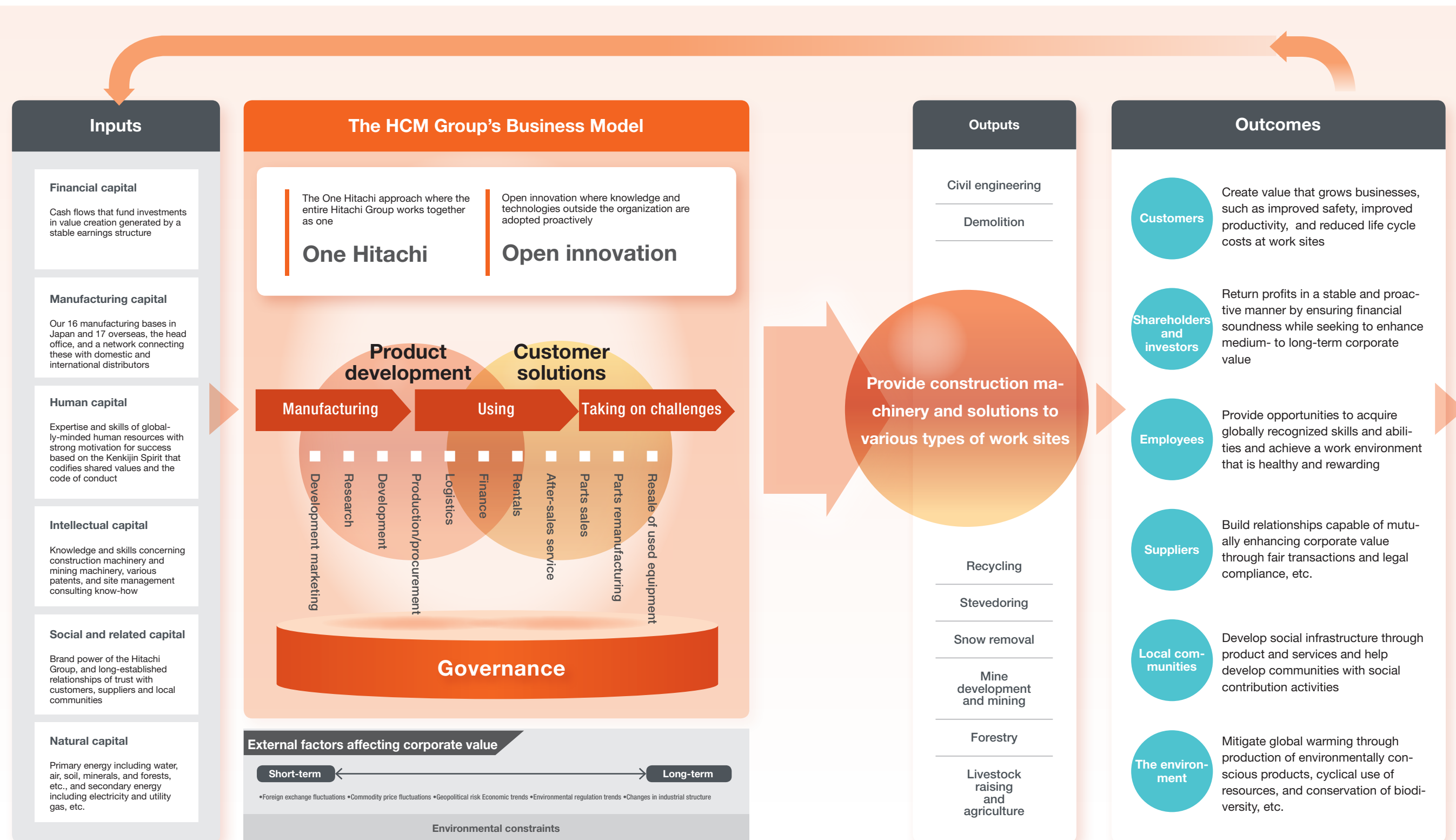
We began providing ConSite and its next-generation menu of services powered by ICT amid the change in customer focus from not only performance but also to cost reductions throughout the life cycle. Since then, the number of ConSite contracted machines has reached 82,431 units. (As of March 31, 2018)

Changes in sales revenue



# The Value Creation Process

The HCM Group's value creation process involves supplying products and services in demand from society, growing to become a company desired by society, and sharing the outcomes with stakeholders. The continuous implementation of this process helps to boost management capital and maximize corporate value.



## The HCM Group's Business Activities

### Development marketing

We focus our energy on creating a global strategic development marketing system in order to provide the most appropriate products for the needs of specific countries and regions in a timely manner.

### Research

We harness the collective strengths of the Hitachi Group to research technology that is "kind to both human beings and the environment" and "technology that creates an even better environment" as a basis of our medium- to long-term growth.

### Development

We develop advanced and innovative construction machinery that offers improved reliability, controllability, and comfort, while meeting a broad range of customer needs.

### Production/procurement

We are dedicated to standardizing and improving quality levels while aiming to achieve the concept of Made by Hitachi where all products are made with the same high quality regardless of which of our manufacturing facilities around the world they are made at.

### Logistics

We are raising logistics efficiencies by building a logistics system and global supply system powered by IT and our know-how in transporting ultra heavy objects.

### Finance

We offer various financing plans for our products to ensure that they can be employed by customers in a format that meets their needs.

### Rentals

We provide various types of construction machinery and equipment needed in the field, including standard machines, specially designed machines, recycling machines, mowers, and submersible pumps, among others.

### After-sales service

We support the preventive maintenance of construction machinery, which includes our ConSite service solution using a wide array of operating data obtained from each individual machine.

### Parts sales

We guarantee the high performance and long service life of our products by supplying high quality parts. This reduces customer costs and helps conserve the environment.

### Parts remanufacturing

We collect replacement parts from repair work and restore them to like new condition at our remanufacturing plant. This supports the operation of construction machinery in even the most harshest work sites.

### Resale of used equipment

We propose the purchase or sale of construction machinery that matches customer needs using our worldwide network and support system.

Realizing the richness of Earth  
and prosperous communities



Message from the President



Kotaro Hirano  
Representative Executive Officer,  
President, Executive Officer and Director

At various sites around the world, we deliver a broad range of value to meet the new needs of customers and society and tackle the challenges posed by sustainable social infrastructure development.

Safety and quality represent matters of the utmost importance that form the bedrock of management

The HCM Group launched a new mid-term management plan called CONNECT TOGETHER in FY2017. The target under this plan is to deliver “Reliable solutions” that exceed customer expectations in the value chain extending across the entire life cycle of construction machinery. The reason why we decided to focus on strengthening and expanding the value chain can be found in the rapid changes taking place in the climate surrounding the construction machinery industry.

Since becoming President in April 2017, I have taken part in dialogue with various stakeholders including customers, suppli-

ers, and employees throughout Japan. Through these meetings, I felt firsthand that changes in work approaches on the frontlines and changes in people’s attitudes are accelerating at a global level. I was also able to confirm that our vision of delivering next-generation products that meet the needs of customers as well as various services and solutions that contribute to site reforms remains sound and correct.

I was involved with HCM’s management prior to becoming President when I served as an executive officer. Since my involvement in management as President, though, safety and quality have been of the greatest interest to me. While business performance is important, safety is what underpins the very foundation of this performance, which involves both the quality of products and services we provide as well as the quality of our

operations.

I now believe that we will not be able to reach our targets and vision if we don’t reinforce and improve the fact that safety and quality represent the very bedrock of management.

**CONNECT TOGETHER 2019**

Provide “Reliable solutions” in the value chain extending across the entire construction machine life cycle that exceed customer expectations

Continuing with reforms in the value chain aimed at establishing a stable management base

Our customers not only in Japan, but also in Europe, the United States, and China are focusing on three important issues. These are how to improve site safety, how to increase productivity, and how to control costs related to fuel and repairs of machines that occur during the life cycle. Similar to my increased awareness of safety, our customers feel it is extremely important to find ways to keep sites accident free and to run operations efficiently.

We need to supply construction machinery that ensure the safe work and operations at sites and construction machinery that are fuel efficient and highly productive to lower site costs. This is what our customers need. Improving site safety and increasing productivity requires more than just enhancing the

performance of products. Only by providing customers with solutions that optimally control machines and site operations along with ways to lower life cycle costs, including finance, will we be able to truly solve the issues customers face today. In emerging countries such as India, national strategies are in place for the rapid advancement of resource development, building of infrastructure for attracting multinational corporations, and creation of environmental regulations.

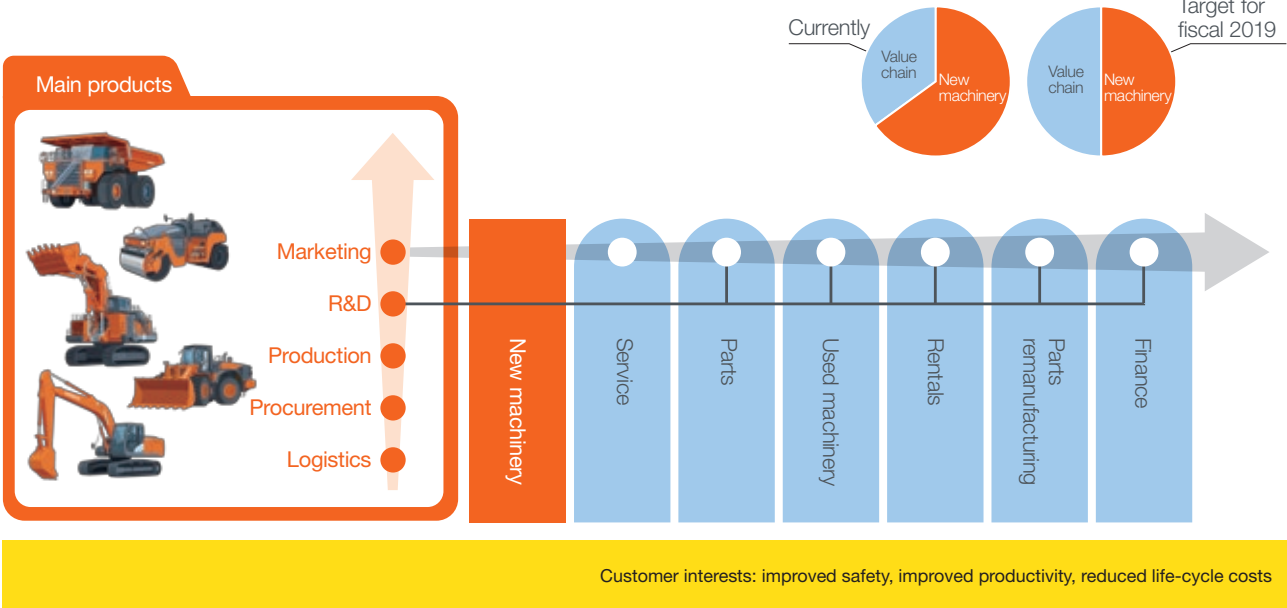
In countries with great potential because of the expansive area in need of development, there is growing interest in clean machinery that clears environmental regulations and Autonomous Haulage System (AHS) dump trucks to alleviate labor shortages.

The HCM Group has delivered products, services and solutions in line with customer needs by quickly identifying changes in the needs of these countries and economic blocs. This enabled us to beat the target laid out in CONNECT TOGETHER 2019 for FY2019 two years ahead of schedule in FY2017, the initial fiscal year under this plan.

However, as I talked about earlier, we are working to achieve more than just numbers as part of our mid-term management plan. Our goal is to also reinforce and expand the value chain and fundamentally change the very foundation of management. Only after we have achieved these qualitative goals can we say that we achieved the mid-term management plan targets.

One of these targets is to achieve a ratio of sales from non-product related businesses (value chain) of 50%. This ratio stood at around 40% in FY2017. Going forward, we are committed to achieving all of these targets as well as transforming the HCM Group’s business structure.

The HCM Group’s Value chain



Value chain reforms also expand connections to solutions to social issues

Reducing environmental impacts through the products, services, and solutions we provide to customers is of the same importance as safety and quality. Looking back on the evolution of construction machinery and the history of the civil engineering and mining industries, I strongly feel that we would not have been recognized by society or developed as a company without delivering value beneficial to the sustainable development of society as a whole.

Following the adoption of the Sustainable Development Goals (SDGs) at the United Nations and the COP21<sup>\*1</sup> Paris Agreement, in FY2015 we reevaluated the relationship between our group businesses and environmental and social issues. This led to the development of three approaches for creating shared value (CSV): Resolving global environmental issues; Enhancing initiatives to increase social infrastructure workforce; and, Contributing to community development.

In FY2016, we established key measures for each of these themes and set individual goals and medium- to long-term KPIs. One of our goals is to reduce greenhouse gas emissions by 33% in 2030, compared to 2010, through the reduction of the environmental impacts of our products.

Within our businesses, most greenhouse gases are emitted when customers use the products we provide. Consequently, it goes without saying that we need to provide products adapted to the exhaust gas emissions regulations of each country. To this end, we are aiming to reduce wasteful energy consumption that occurs at our customers' production sites by developing hybrid machines that have a high environmental performance, as well as service solutions.

For example, in terms of our ICT/IoT-based solutions called Solution Linkage<sup>\*2</sup>, we propose to customers solutions compliant with i-Construction<sup>\*3</sup> and AHS dump trucks for mining sites. These solutions help to increase the efficiency of operations and fuel economy of construction machinery.

In the case of dump trucks, there are differences in how the brakes are used and speed is applied depending on the driver. Using an unmanned AHS evens out these differences, reducing tire wear and fuel consumption.

In terms of i-Construction initiatives, we sell an ICT hydraulic excavator with a system that enables semi-autonomous excavation based on 3D design data sent to the machine. This not only shortens work periods, but also increases productivity and fuel efficiency simultaneously by reducing wasteful work such as over digging necessitating soil replacement.

Furthermore, we began providing a new solution called Con-Site OIL in Europe from October 2017 and in Japan from FY2018. This solution uses sensors to monitor engine oil and hydraulic fluid conditions and notify the customer and distributor automatically whenever an abnormal reading is detected, reducing downtime.

While improving fuel economy of machines has been the single most important environmental measure in the past, today, we can largely give back to the environment by controlling the operations and movements of construction machinery, which also leads to work style reform at the customer level.

The HCM Group has expanded its connections with customers in terms of working to solve social issues together by not only supplying products, but also delivering value through solutions for machinery use and how to manage and operate entire work sites.

Another area we are working on is electricity-powered construction machinery. Currently, such construction machinery mainly is operated by plugging in a cable to a commercial power supply, but in the not too distant future smaller machinery such as mini excavators may be able to be operated using batteries alone. Our ability to harness the Hitachi Group's technologies for railways and automotive components is a major strength for HCM in the growing trend of electrification.

<sup>\*1</sup> COP21: The 21st Conference of the Parties (COP 21) to the United Nations Framework Convention on Climate Change, held in Paris, France on November 30, 2015. The Paris Agreement, which forms the framework for the year 2020 onward when the Kyoto Protocol expires, has been adopted by 196 countries and territories around the world. This is the first agreement to include developing countries in the promise to reduce greenhouse gases.

<sup>\*2</sup> Solution Linkage: HCM's ICT/IoT-based solutions that help to improve safety, improve productivity, and reduce life cycle costs together with customers. In finding solutions to challenges, HCM will take the lead in using the "One Hitachi" approach to deliver the Hitachi Group's wide ranging technologies and propose solutions that utilize open innovation combining the expert technologies of business partners.

<sup>\*3</sup> i-Construction: i-Construction is an initiative by the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) promoting the maintenance of safety and improvements to wage standards for people who work on construction sites by making use of information and communication technologies (ICTs) to improve civil works and construction site productivity and efficiency and ameliorate the corporate business environment. The i-Construction Committee was launched in December of 2015 and it established its basic policy as working towards the introduction of ICTs to construction machinery and surveying, as well as standardization of specifications and leveling of yearly construction periods. From FY 2016, this began to bring in projects implemented by MLIT.

Our greatest strength is HCM's spirit passed down throughout our history

In 2020, the HCM Group will mark its 70th anniversary since commencing the mass production and sale of construction machinery and its 50th anniversary since being spun off from Hitachi Ltd.

Soon after the end of World War II, we embarked on the development, manufacture and sale of construction machinery based on a commitment to help rebuild Japan using our original technologies. The origin of this commitment can be found in Hitachi's Founding Spirit of harmony, sincerity, and pioneering spirit.

This Founding Spirit has been passed down through the years as our very identity, and today, we still stick to the ideology of the 3Cs—Challenge, Customer and Communication found in the Kenkijin Spirit, which codifies the shared values and code of conduct of the HCM Group. Our employees are one of our greatest strengths. They do not fear failure, but instead possess the spirit of challenge, and always listen sincerely to the voice of our customers and the public. Employees such as this are carrying out customer-first corporate activities around the world. In addition to the Hitachi Group's spirit, our major brand power and wealth of technological resources represent another one of our

major strengths. Furthermore, our strong relationships built with stakeholders around the world, including suppliers who we manufacture with, distributors who sell and service our products, and customers using our machinery, represent another strength.

There is a reason why the HCM Group established the Kenkijin Spirit. From our founding through Japan's period of rapid economic growth up until the 1990s the HCM Group's business focused predominantly on Japanese people and the Japan market. However, the wave of globalization hit in the middle of the 1990s and spread instantaneously, as the number of non-Japanese customers along with manufacturers and seller began to increase.

This situation gave rise to concerns that the HCM Group's basic identity was being diluted. For example, Japanese people have a fixed impression simply by hearing the name Hitachi. Non-Japanese people, however, are not aware of this tacit knowledge, and this became one of the factors behind a lack of solidarity as a group of companies. At the time, we, of course, had a corporate philosophy, but we found that we would not be able to become one as an organization without something akin to guidelines of action identifiable among not only Japanese people, but people of other nationalities, too. As a result, in 2006, we summarized this tacit knowledge into three words, which marked the birth of the Kenkijin Spirit's 3Cs.

Today we have grown into a company with a workforce of 24,000 people, where non-Japanese nationals outnumber Japanese nationals. I hope to make the Kenkijin Spirit a set of guidelines for strengthening the cohesiveness of the group around the world, and I am sharing this commitment internally through various opportunities.

■ Ideology of the 3Cs

3C

Challenge  
Customer  
Communication

Transforming changes in the market and workplace, to energize our challenging spirit

Each and every employee, too, must change in the face of changing markets and in the process of changing the organization. The HCM Group is working toward a single goal with the help of its employees around the world representing various nationalities. It is only natural that the concept of work is different in each region given local laws and cultures. The key is not to establish a uniform rule that defines a particular work style, but rather to develop an environment that is friendly to everyone in each region. Work style values differ not only between country and region, but also exist between age groups as well.

For example, the most comfortable work style for people in their 20s differs dramatically from those in their 50s, even in Japan. In other words, I'm aware that creating an environment



where people feel happy and excited about working at the HCM Group and can contribute their individuality and capabilities more than ever before, regardless of region, nationality, age or gender, is an area HCM needs to work at the moment.

In April 2018, David Harvey, the President of Hitachi Construction Machinery (Australia) Pty Ltd., was newly appointed as Executive Officer of Hitachi Construction Machinery. Adding a non-Japanese way of thinking and viewpoint to the group's management is expected to be a major positive for promoting the transformation of employee work styles and thinking.

As part of our diversity promotion efforts, we have been supporting the activities of women and minorities. I feel that we still need to reinforce our efforts toward promoting the more active role of women on the frontlines of manufacturing. Taking into account Japan's declining birthrate and aging population and the shortage of workers, I recognize that promoting reform on the frontlines aimed at development an environment conducive to women and seniors is an urgent task from the standpoint of HCM's increased productivity and sustained growth.

As I mentioned above, global markets are undergoing major changes in recent years. I feel that the speed of change in the construction machinery market is particularly fast. Following changes at customers, technology is evolving at a fast pace, while the value provided by business is changing rapidly, too.

The HCM Group stands committed to transforming itself with the Kenkijin Spirit close at heart so as to energize our efforts to tackle challenges like never before. I firmly believe that this commitment is the key to paving the way for our future beyond the milestone year of 2020.



# Mid-term Management Plan (Fiscal 2017-2019)

The HCM Group launched a new mid-term management plan called CONNECT TOGETHER 2019 in FY2017 as the final step toward realizing the 2020 VISION. The goal under CONNECT TOGETHER 2019 is to deliver “Reliable solutions” that exceed customer expectations in the value chain extending across the entire life cycle of construction machinery, and aim to establish a corporate structure resilient in the face of change by reinforcing and expanding the value chain.



## Targets of CONNECT TOGETHER 2019

The HCM Group has delivered products, services and solutions in line with customer needs by quickly identifying changes in the needs of customers. This enabled us to beat the target laid out in CONNECT TOGETHER 2019 for FY2019 two years ahead of schedule in FY2017, the initial fiscal year under this plan.

However, we aim to achieve more than just numbers under the mid-term management plan. Our goal is to achieve a cor-

porate structure resilient to change and reform our culture for a more stable management base.

Specifically, we will reinforce the value chain including services, parts, used equipment, rentals, parts remanufacturing, and finance, maintain our number one position in hydraulic excavators while expanding the wheel loader and dump truck businesses, step up R&D, and usher in reforms using ICT and IoT.

	GROW TOGETHER 2016	CONNECT TOGETHER 2019	
	Fiscal year ended March 31, 2017	Fiscal year ended March 31, 2018	Fiscal year ending March 31, 2020
Adjusted operating income ratio	3.7%	9.8%	9% or more
ROE	2.0%	14.1%	9% or more
Net D/E ratio	0.46	0.33	0.4 or less
Dividend payout policy	31.8%	30.1%	approximately 30% or more

[Assumptions for the fiscal year ending March 31, 2020]

Sales revenue	850 billion yen	Foreign exchange rates	1 USD = 100 yen / 1 Euro = 110 yen / 1 RMB = 15 yen
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## Main results of activities and future challenges

	Results of Activities Aimed at 2020	Future challenges
R&D	<div>New hybrid hydraulic excavators</div> <div>ICT hydraulic excavators</div> <div>Equipment for Indonesia's agriculture and forestry industries</div>	<div>(1) Develop ICT and IoT solutions</div> <div>(2) Reinforce global development system in tune with regional needs</div>
Mining Operations	<div>Develop high-performance stability control technologies / trolley designs / autonomous haulage system (AHS) for the AC-3 series of dump trucks</div> <div></div>	<div>(1) Enhance presence in dump trucks</div> <div>(2) Develop and commercialize AHS</div>
Value chain	<div>New parts remanufacturing business run by H-E Parts in collaboration with Hitachi Construction Machinery Zambia</div> <div>Reinforce used equipment business/Expand sales of used equipment from Japan (auction business)</div>	<div>(1) Energize business through in-house (group) mining resources and information sharing</div> <div>(2) Advanced failure/predictive diagnostics utilizing Big Data analysis, ICT, and IoT</div> <div>(3) Reinforce used equipment/rental business</div>
Structural reform	<div>Transition wheel loaders for the North America market from the KCM brand to the Hitachi brand</div> <div>Consolidate and expand manufacturing and sales sites for wheel loaders in North America</div>	<div>(1) Increase profit margins of each business</div> <div>(2) Enhance responsiveness to individual customers and distributors through improve facilities</div>



# Performance Highlights

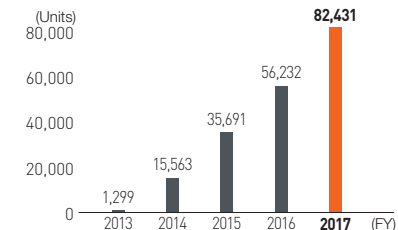
## Number of ConSite contracts

82,431 units



As a partner overseeing customers' machines, we offer ConSite solutions utilizing the latest ICT globally in order to support the day to day operations of customers.

### Changes in the number of ConSite contracts



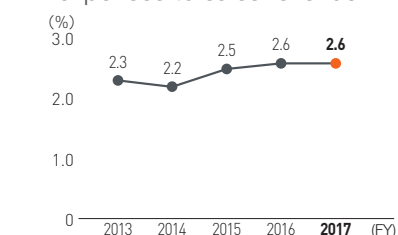
## Ratio of R&D expenses to sales revenue

2.6%



We aim for "social contributions through harmony and recycling" based on our research and development into technology that is "kind to both human beings and the environment" and "technology that creates an even better environment".

### Changes in the ratio of R&D expenses to sales revenue



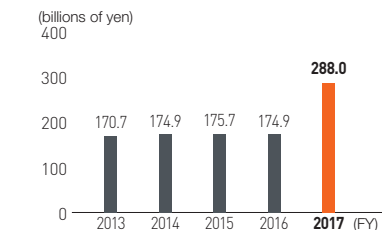
## Parts and service sales revenue (including solutions business)

288.0 billion yen



We will add H-E Parts and Bradken to the HCM Group to reinforce our services and parts manufacturing and sales, while expanding solutions the help to resolve customer issues.

### Changes in sales revenues by business



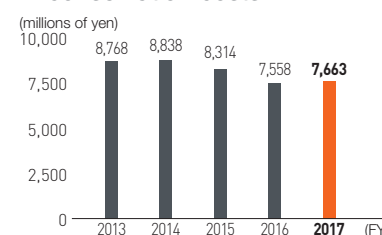
## Environmental conservation costs

7,663 million yen



We are promoting sustainable improvement activities like that make electrical power consumption visible to reduce peak electricity usage and volume of usage.

### Changes in environmental conservation costs



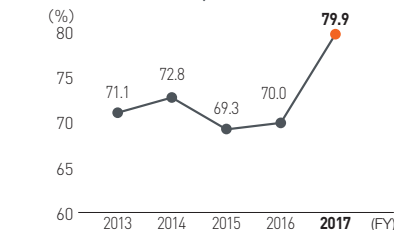
## Ratio of sales outside of Japan

79.9%



We supply highly reliable construction machinery that fulfills varying needs for performance and quality by correctly understanding the needs of each country and region.

### Changes in the ratio of sales outside of Japan



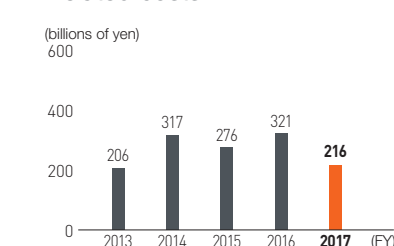
## Social contribution related costs

216 million yen



Under the Hitachi Construction Machinery Group Social Contribution Policy formulated in 2006, we continually engage in activities that give back, including humanitarian support, environmental conservation and local community coexistence.

### Changes in social contribution related costs



## 5-year Financial History Hitachi Construction Machinery and its Consolidated Subsidiaries Fiscal years ended March

IFRS (J-GAAP)	2014	2015	2016	2017	2018
Unit: millions of yen (excluding per share data)					
<b>For the fiscal year</b>					
Revenue [Net sales]	[802,988]	815,792	758,331	753,947	<b>959,153</b>
Adjusted operating income* [Adjusted operating income]	[ - ]	61,919	23,364	28,265	<b>93,582</b>
Operating income [Operating income]	[69,163]	63,131	34,052	23,622	<b>95,737</b>
Income before income taxes [Net income before taxes]	[52,775]	58,953	24,517	23,859	<b>95,612</b>
Net income attributable to owners of the parent [Net income attributable to owners of the parent]	[28,939]	26,023	8,804	8,022	<b>60,004</b>
<b>At fiscal year-end</b>					
Total assets [Total assets]	[1,087,191]	1,064,673	926,628	1,012,208	<b>1,089,796</b>
Working capital [Working capital]	[271,977]	269,906	236,806	129,664	<b>231,407</b>
Total equity attributable to owners of the parent [Shareholders' equity]	[383,355]	431,227	395,963	399,619	<b>448,502</b>
Interest-bearing debt [Interest-bearing debt]	[363,411]	287,673	217,895	248,701	<b>230,665</b>
<b>1 Per share data (yen)</b>					
Net income attributable to owners of the parent per share (basic) [Net income]	[136.24]	122.44	41.41	37.72	<b>282.16</b>
Net income attributable to owners of the parent (diluted) [Net income attributable to owners of the parent (diluted)]	[136.20]	122.42	41.41	37.72	<b>282.16</b>
1 Equity attributable to owners of the parent per share [Net assets]	[1,827.59]	2,028.57	1,861.93	1,879.14	<b>2,109.04</b>
Cash dividends per share [Cash dividends per share]	[50.00]	60.00	40.00	12.00	<b>85.00</b>
<b>Others</b>					
Net income attributable to owners of the parent on revenue (%) [Return on net sales (%)]	[3.6]	3.2	1.2	1.1	<b>6.3</b>
Net income on equity attributable to owners of the parent (%) [Return on equity (%)]	[7.7]	6.3	2.1	2.0	<b>14.1</b>
Equity attributable to owners of the parent (%) [Equity ratio (%)]	[35.7]	40.5	42.7	39.5	<b>41.2</b>
Price-earning ratio (times) [Price-earning ratio (times)]	[14.59]	17.17	43.18	73.57	<b>14.55</b>

\* Adjusted operating income: a unified indicator of profits used by the Hitachi Group in which operating income is subtracted by other income and other expenses.  
(Note) The Company has prepared IFRS-compliant consolidated financial statements since the fiscal year ended March 31, 2015.

Summary of ESG Data for the Previous 5-year Period

Environment conservation

\* Environmental data as of March 31.

	Applicable years	FY2013	FY2014	FY2015	FY2016	FY2017 <sup>(Note 2)</sup>
Energy usage and efficiency						
Energy consumption (usage) <sup>(Note 1)</sup>	Hitachi Construction Machinery Group	80.8 thousand kl	72.6 thousand kl	65.6 thousand kl	75.3 thousand kl	81.2 thousand kl
Improvement rate of energy basic unit <sup>(Note 1)</sup>	Hitachi Construction Machinery Group	16.4%	15.2%	14.7%	23.2%	26.1%
Reduction of energy consumption	Hitachi Construction Machinery Group	0.7 thousand kl	1.5 thousand kl	1.5 thousand kl	4.0 thousand kl	1.2 thousand kl
Greenhouse gas (GHG) emissions						
GHG emissions (reduction amount)	Hitachi Construction Machinery Group	175.4 thousand t (1.0 thousand t)	174.2 thousand t (2.7 thousand t)	149.7 thousand t (2.9 thousand t)	174.2 thousand t (8.5 thousand t)	188.4 thousand t (2.6 thousand t)
Reduction of CO <sub>2</sub> emissions from products	Hitachi Construction Machinery Group	189 million t	236 million t	278 million t	293 million t	327 million t
Use of water resources						
Water usage	Hitachi Construction Machinery Group	1,095.5 thousand m <sup>3</sup>	1,076.8 thousand m <sup>3</sup>	951.8 thousand m <sup>3</sup>	1,196.4 thousand m <sup>3</sup>	1,352.7 thousand m <sup>3</sup>
Waste volume						
Total waste volume (generated)	Hitachi Construction Machinery Group	60.8 thousand t	48.6 thousand t	39.4 thousand t	51.9 thousand t	62.6 thousand t
Hazardous waste volume	Hitachi Construction Machinery Group	1.7 thousand t	1.6 thousand t	1.1 thousand t	1.4 thousand t	1.3 thousand t
Environmentally conscious products						
Percentage of environmentally conscious products	Hitachi Construction Machinery Group	89.9%	91.1%	92.1%	93.1%	96.5%

(Note 1) Main consolidated production sites in Japan and overseas.  
(Note 2) Includes H-E Parts, which is newly included in the scope of consolidation, but does not include Bradken. In addition, Hitachi Sumitomo Heavy Industries Construction Cranes Co., Ltd. (currently, Sumitomo Heavy Industries Construction Cranes Co., Ltd.), accounted for as an affiliate using the equity method in FY2016, is not included

Society

\* Personnel data and number of companies as of March 31. Employment rate of persons with disabilities as of December 1.

	Applicable years	FY2013	FY2014	FY2015	FY2016	FY2017
Number of permanent employees (consolidated basis)	Hitachi Construction Machinery Group	20,911 persons	21,126 persons	21,193 persons	23,858 persons	23,925 persons
Number of permanent employees (non-consolidated basis)	Hitachi Construction Machinery (non-consolidated)	4,756 persons	4,704 persons	4,315 persons	3,985 persons	4,072 persons
Men	Hitachi Construction Machinery (non-consolidated)	4,477 persons	4,405 persons	4,040 persons	3,725 persons	3,824 persons
Women	Hitachi Construction Machinery (non-consolidated)	279 persons	299 persons	275 persons	260 persons	248 persons
Ratio of permanent employees that are female	Hitachi Construction Machinery (non-consolidated)	5.9%	6.4%	6.4%	6.5%	6.1%
Contract employees	Hitachi Construction Machinery Group	4,531 persons	3,920 persons	3,305 persons	2,385 persons	2,167 persons
Ratio of contract employees	Hitachi Construction Machinery Group	17.8%	15.7%	12.5%	9.1%	8.3%
Contract employees	Hitachi Construction Machinery (non-consolidated)	1,040 persons	839 persons	653 persons	381 persons	384 persons
Number of employees taking childcare leave	Hitachi Construction Machinery (non-consolidated)	11 persons	13 persons	25 persons	29 persons	27 persons
Ratio of employees returning to work after childcare leave	Hitachi Construction Machinery (non-consolidated)	100.0%	100.0%	96.0%	96.6%	93.0%
Number of employees taking family care leave	Hitachi Construction Machinery (non-consolidated)	0 persons	3 persons	1 persons	0 persons	1 persons
Employment rate of persons with disabilities	Hitachi Construction Machinery (including subsidiaries in Japan)	2.17%	2.18%	2.13%	2.13%	2.15%
Occupational injuries (frequency rate of lost worktime accidents)	Hitachi Construction Machinery (non-consolidated)	0.09	0.46	0.10	0.25	1.02
Occupational injuries (frequency rate of lost worktime accidents)	Hitachi Construction Machinery (subsidiaries in Japan)	0.31	0.55	1.22	1.19	0.81
Training on occupational injuries (number of employees attending Group company presentations)	Hitachi Construction Machinery Group	Approx. 100 persons	126 persons	128 persons	95 persons	108 persons
Number of consolidated subsidiaries and equity-method affiliates						
Consolidated Japan		12 companies	11 companies	12 companies	10 companies	10 companies
Consolidated Overseas		34 companies	32 companies	32 companies	75 companies	74 companies
Equity-method affiliates Japan		5 companies	5 companies	3 companies	4 companies	4 companies
Equity-method affiliates Overseas		7 companies	9 companies	8 companies	8 companies	17 companies
Number of participants in the International Skills Competition (countries)	Hitachi Construction Machinery Group	75 persons (6countries)	70 persons (7countries)	82 persons (8countries)	81 persons (6countries)	78 persons (6countries)
Overseas	Hitachi Construction Machinery Group	25 persons (5countries)	26 persons (6countries)	34 persons (7countries)	27 persons (5countries)	23 persons (5countries)

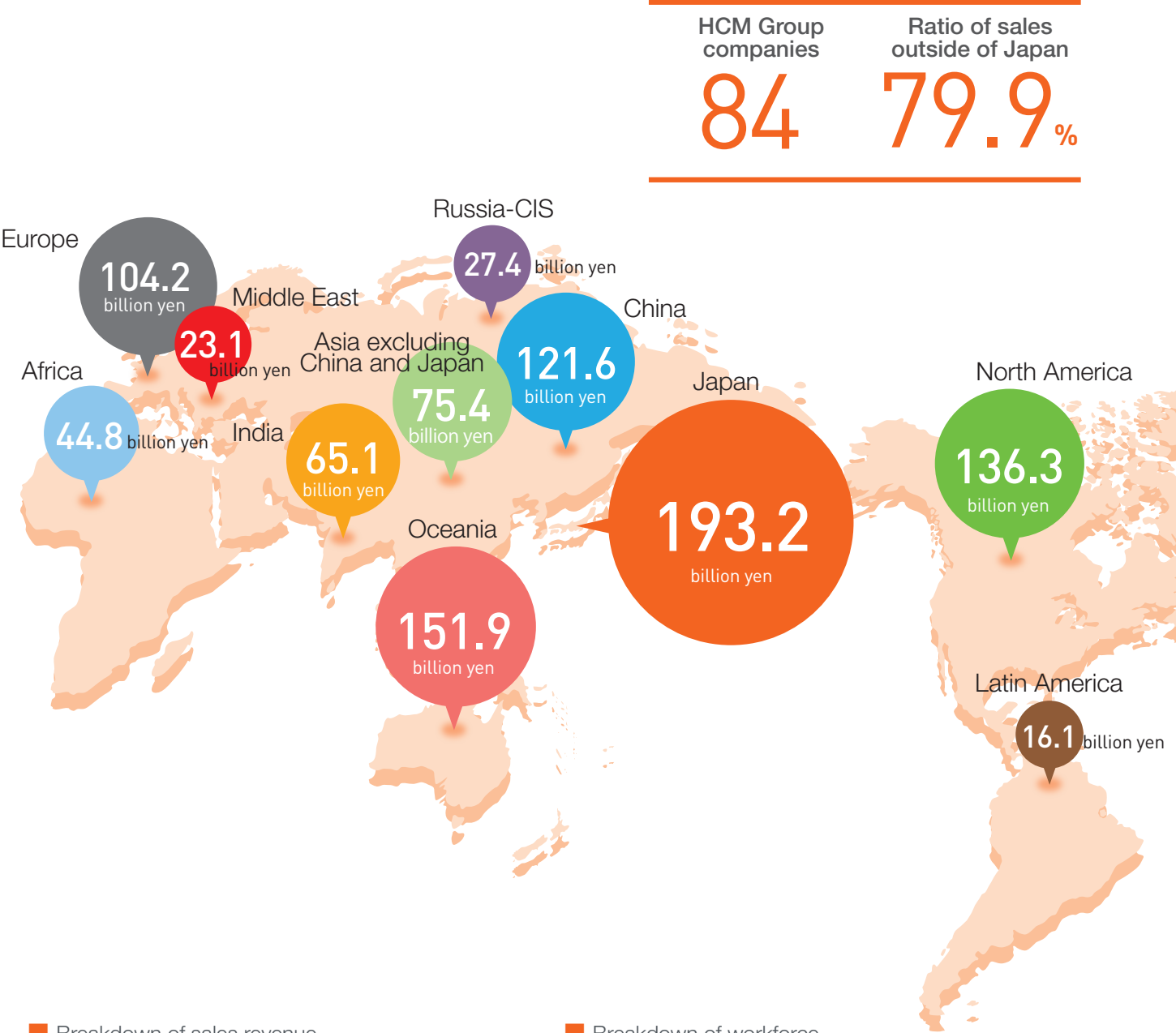
Governance

\* Personnel data as of March 31.

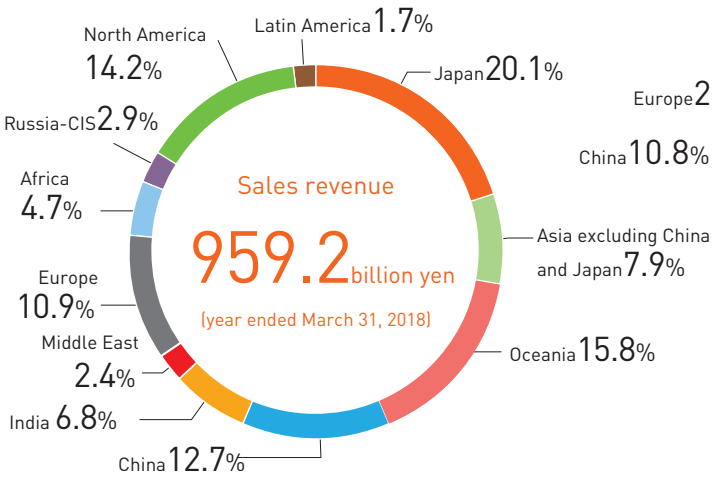
	Applicable years	FY2013	FY2014	FY2015	FY2016	FY2017
Ratio of managers that are female	Hitachi Construction Machinery (non-consolidated)	0.4%	0.5%	0.4%	0.7%	0.7%
Ratio of executive officers that are female	Hitachi Construction Machinery (non-consolidated)	0.0% (0 persons)	4.5% (1 persons)	4.8% (1 persons)	5.0% (1 persons)	4.3% (1 persons)
Number of employees receiving compliance training (excluding e-learning programs)	Hitachi Construction Machinery Group	3,627 persons	1,874 persons	5,247 persons	5,784 persons	540 persons <sup>(Note)</sup>

(Note) Activities in FY2017 mainly involved the employee awareness survey. In FY2018 and beyond, activities will focus on training that reflects the results of the employee awareness survey.

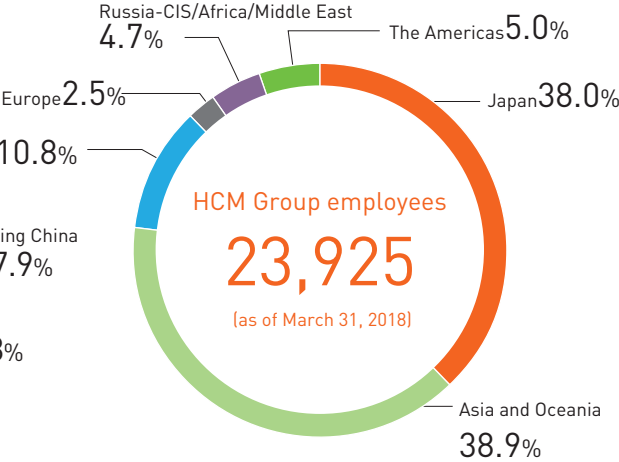
Sales revenue by region



Breakdown of sales revenue



Breakdown of workforce





## New Form of Value Provided by HCM Solution Linkage



HCM's construction machinery that underpins social infrastructure has evolved considerably over the years driven by various technological innovations.

At the same time, the mining sector, which is searching for greater management efficiencies, and construction sites, faced with labor shortages, both require greater innovations in the production processes. Given this, in FY2017 the HCM Group rolled out a proprietary solution called Solution Linkage that accumulates know-how while working together with customers to solve their challenges. Solution Linkage represents a new form of value creation provided by the HCM Group, which has extensive experience in supporting customers' businesses using ICT and IoT.

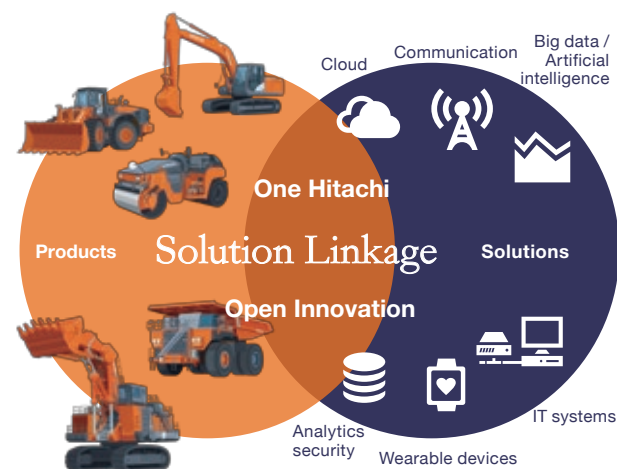
### Combining the many advanced technologies of the Hitachi Group with the expert technologies of business partners

Solution Linkage is HCM's ICT/IoT-based solution that helps to address such customer work site challenges as improved safety, improved productivity, and reduced life cycle costs while working together with customers.

With HCM the focal point, using the "One Hitachi" approach to deliver the Hitachi Group's wide ranging technologies and propose solutions that utilize "open innovation" combining the expert technologies of business partners represent the key to finding solutions to these challenges.

Today, customers require not only high quality and high performance products from construction machinery manufacturers, but also solutions for working together to find solutions to challenges and generate value together. This marks a major evolution in customer needs. The HCM Group is committed to the further evolution of Solution Linkage so as to always be one step ahead of customer needs.

■ Conceptual Image of Solution Linkage



### Developing more advanced mining operation management solutions

Wencomine / Wencolite

Wencomine and Wencolite are the names of Fleet Management System (FMS) provided by Wenco of Canada, a subsidiary of the HCM Group. These systems contribute greatly to streamlining and increasing the efficiencies of mining customer's operation by harnessing the most cutting edge information technologies available today.

### Wenco's FMS are used at around 150 mines around the world

Generally, at a mining site, several mining trucks are assigned to one digger/loader so that minerals can be loaded steadily as they are removed from the ground and hauled to a processing facility or stock yard. In order to smoothly and efficiently undertake this work, the dispatcher, who is responsible for dispatching vehicles, issues orders to vehicle operators while judging the state of operations. This requires accurate position information and operating information for mining machines.

Wenco's FMS provide highly accurate information to the dispatcher using advanced functions and top-class operability. Wenco's FMS include Wencomine for large-scale mine operations and Wencolite, lite version for small- and medium-sized

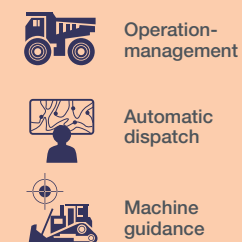
mines. These FMS are in use at around 150 mines around the world.



Increasing efficiencies and optimizing mining operations through centralized management

### Accommodating customer's new needs with add-on functions

#### Basic functions



#### Add-on functions



Solution Linkage aims for the further advancement of FMS using the One Hitachi initiatives and open innovation. Avoca, a new solution for data analysis and visualization, is a function that enables the effective use of operating data stored in a database. In addition, there are various other functions that can be added on, including ReadyLine, which collects and analyzes sensor data on mining machine temperature and vibrations, Maintenance Monitor, which manages maintenance schedules, and TireMax, which helps to reduce tire failures and extend tire life, to name a few.

#### Future Developments

In addition to FMS, the Autonomous Haulage System (AHS) for mining trucks is another cutting-edge technology that contributes to a dramatic increase in the operation and energy efficiency of mining operations. HCM's AHS is currently undergoing various verification testing aimed at commercialization in FY2019. The know-how accumulated in FMS is being utilized in the technologies for safety and efficiently operating multiple AHS trucks in the site. Going forward, we will contribute to solutions to customer challenges while capitalizing on the benefits of both FMS and AHS.

An example of AHS for mining trucks is introduced in CSV Theme 2.

CSV Theme 2  
Enhancing initiatives to increase  
social infrastructure workforce

→ p36





## Core ICT Construction Solution

### Solution Linkage Cloud



Solution Linkage Cloud is oriented as platform of solutions provided by HCM. Applications provided on the cloud are used based on the contents and the process of work, contributing greatly to improved productivity on work sites.

### Using work site visualization to optimize the relationship between people and work

In September 2017, HCM released Solution Linkage Cloud as its proprietary cloud solution optimized for ICT Construction, including i-Construction advocated by Japan's Ministry of Land, Infrastructure, Transport and Tourism. Solution Linkage Cloud delivers a number of useful applications for ICT Constructiton. Through these applications, customers can improve safety, improve productivity, and reduce life cycle costs.

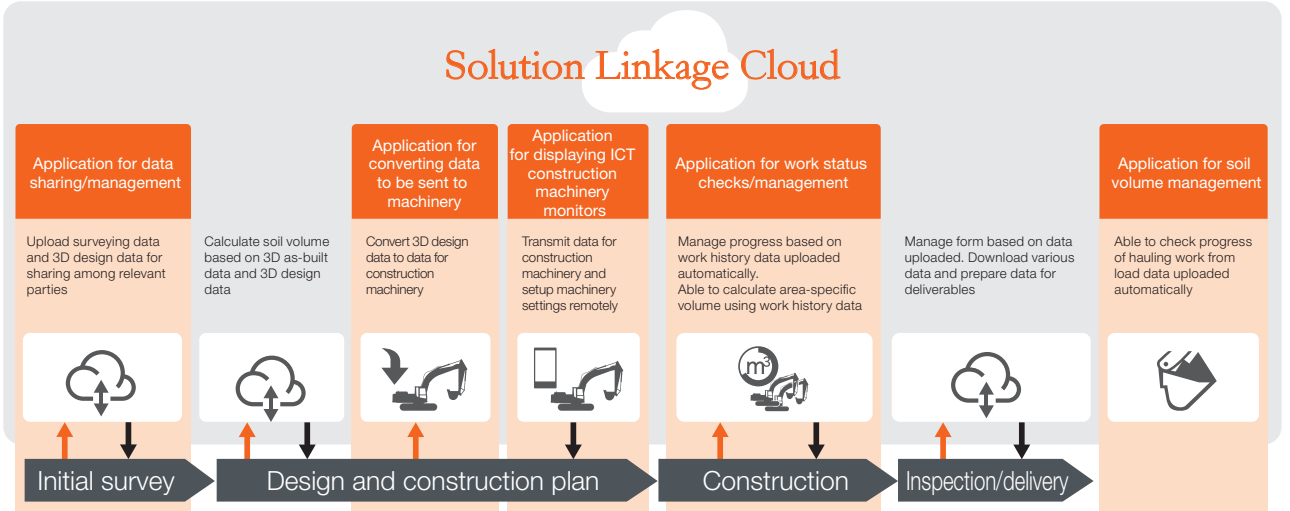
Applications provided by Solution Linkage are used based on the contents and the process of work, making it possible to carry out work more efficiently on site. For example, surveying data or 3D design data can be uploaded to the cloud for sharing among relevant parties and progress can be managed based on work history data transmitted from ICT construction machinery.

Solution Linkage Cloud offers the possibility of creating global value creation by connecting 3D data seamlessly and encouraging collaboration through open innovation in all stages of the work process, from surveying to maintenance.



Sample image of the Solution Linkage Cloud portal site

#### Applications connected by the cloud



**Future Developments**

Looking ahead, we will create a portal site that can respond flexibly to sites where construction machineries from various makers are being operated, by providing a wide range of applications.

Our goal is to expand solutions for solving customer challenges through co-creation activities with customers in a host of different sectors, including not only civil engineering and construction, but also quarrying, dredging, forestry, and steelmaking, among others.

An example of Solution Linkage Cloud applications is introduced in CSV Theme 2.

CSV Theme 2  
Enhancing initiatives to increase social infrastructure workforce → **p37**


## Recognitions and Awards

#### Major Recognitions and Awards in FY2017


Name of award / Month and year awarded	Sponsoring organization	Organizations receiving the award	Evaluation
Excellence Award at the 21st Environmental Communication Awards [February 2018]	Ministry of Environment, The Global Environmental Forum (GEF)	HCM Group's CSR & Financial Report 2017, and Environmental Website	Awarded for our consistent policies from the top commitment to selection of key performance indicators (KPI) reflected in products, as well as mapping the SDGs against the value chain to clearly illustrate the issues and linkages to sustainability within our entire value chain.
Organizations (large enterprise category) Recognized under the 2018 Certified Health & Productivity Management Outstanding Organizations Recognition Program - White 500 [February 2018]	Ministry of Economy, Trade and Industry, Nippon Kenko Kaigi	Hitachi Construction Machinery, Hitachi Construction Machinery Tierra	Awarded for initiatives to energize organizations to achieve health management, including 1) the "Health Management Declaration" from top management and initiatives to maintain and promote health, 2) addressing health issues faced by employees including mental health, in collaboration with the health insurance society, 3) involvement of certified professionals (industrial physicians or public health nurses), 4) optimization of work hours and realization of a comfortable work environment, and 5) promotion of work-life balance.
First Prize in the Zambia KAIZEN Awards [February 2018]	Zambia KAIZEN Council, Japan International Cooperation Agency (JICA)	Hitachi Construction Machinery Zambia	FINAL DRIVES, the team representing the Hitachi Construction Machinery Zambia Components remanufacturing Center participated in the Zambia KAIZEN Convention held in Lusaka, the capital of Zambia,. Received first place out of 12 teams of manufacturing unit competing in "improvement of toolbox set up methods" as part of the case example presentation.
Outstanding Integrated Report chosen by domestic equity management institutions [January 2018]	Government Pension Investment Fund (GPIF)	HCM Group's CSR & Financial Report 2017	GPIF asked 16 organizations involved in managing Japanese stocks to select candidates for Outstanding Integrated Report and Highly Improved Integrated Report. HCM Group's CSR & Financial Report 2017 was chosen as the top report among candidates from a total of 70 companies.
HCM received the Judges' Honorable Mention Award at the 6th Contest for Corporate Activities on Biodiversity [December 2017]	National Land Afforestation Promotion Organization, Aroma Environment Association of Japan, Water Earth and Green Foundation, Global Environmental Action	Hitachi Construction Machinery (Shanghai), Hitachi Construction Machinery (China)	Implemented desert afforestation balancing forest restoration and community revitalization through water bucket relay for the future in support of the philosophy of NPO Green Network, with the dual goals of forest restoration in Horqin desert in China and regional revitalization. Received the award for practical efforts in preserving biodiversity and sustainable usage.
Fiscal 2017 Kanto Region Invention and Innovation Award at the Commissioner of the Patent Office Awards [November 2017]	Japan Institute of Invention and Innovation	Energy saving system for hydraulic excavators TRIAS (Patent number 5572586)	The proprietary three-pump hydraulic system enables precise control of hydraulic actuators with little throttle pressure loss. Awarded for its contribution to meeting customer needs for outstanding operability and improved fuel efficiency.
Artisan's Masterpiece Award at the Construction Machinery Industry Internet Conference (CMIIIC2017) [November 2017]	HC360.com	ZX490LCH-5A large hydraulic excavator of Hitachi Construction Machinery (China)	The ZX490LCH-5A large hydraulic excavator was chosen based on over 1.8 million votes on the Internet over a 6-month period, user reviews, and expert judgment for being a product that meets market needs. This marks the fourth consecutive year we received this award since the EX8000E-6 electric-powered ultra-large hydraulic excavator received the award in 2014.
Received the Hefei City Project Hope Award [August 2017]	Hefei City, Anhui Province	Hitachi Construction Machinery (China)	Hitachi Construction Machinery China has been taking part in social interest events in the city of Hefei with an emphasis on giving back to society. In particular, in the area of children's education, the construction of Hitachi Construction Machinery Songgang Xi Wang Elementary School in 2010 was financed in part with an education fund HCMC donated to Hefei City. HCMC continues to interact with the children of this elementary school through regular visits, the donation of educational supplies, and by providing opportunities to the children so they can have various experiences.

Management Structure


■ Directors (as of June 25, 2018)




Kazushige Okuhara  
Outside Director




Haruyuki Toyama  
Outside Director




Junko Hirakawa  
Outside Director




Tatsuro Ishizuka  
Director




Tetsuo Katsurayama  
Director




Toshikazu Sakurai  
Director




Koji Sumioka  
Director



Koji Tanaka  
Director



Kotaro Hirano  
Director



Hirotoyo Fujii  
Director

■ Executive Officers (as of June 25, 2018)

Representative Executive Officer, Chairman and Executive Officer	Tatsuro Ishizuka
Representative Executive Officer, President and Executive Officer	Kotaro Hirano
Representative Executive Officer, Executive Vice President and Executive Officer	Koji Sumioka
Executive Vice President and Executive Officer	Yasushi Ochiai
Senior Vice President and Executive Officer	Tetsuo Katsurayama
Senior Vice President and Executive Officer	Michifumi Tabuchi
Senior Vice President and Executive Officer	Hirotoyo Fujii
Vice President and Executive Officer	Hideshi Fukumoto
Vice President and Executive Officer	Naoyoshi Yamada

Executive Officer	Takaharu Ikeda
Executive Officer	Sonosuke Ishii
Executive Officer	Yusuke Kajita
Executive Officer	Moriaki Kadoya
Executive Officer	Masafumi Senzaki
Executive Officer	Masaaki Hirose
Executive Officer	Katsuhiko Murakami
Executive Officer	Makoto Yamazawa
Executive Officer	David Harvey

(Note) Executive officers are listed in the Japanese syllabic order for each job title.

Calculating executives' compensation (performance-linked compensation system)

HCM's Compensation Committee sets the policy for deciding the amount of compensation for the company's board members and executive officers in accordance with regulations stipulated by the Companies Act applicable to companies with a nominating committee, etc. Compensation standards are established commensurate with the capabilities and responsibilities required and after consideration of remuneration levels at other companies.

Compensation to Board members consists of a "monthly fee," which is the basic compensation for full- or part-time service plus an amount calculated in accordance with the Director's position and whether occupying the seat or not in each committee, and a "year-end allowance," which is multiplying the "monthly fee" with a constant coefficient.

Compensation to Executive Officers consists of a "monthly fee" in accordance with the officer's position referring standards in general, and "performance-linked compensation," which is determined in line with the Executive Officer's performance and results achieved in the officer's responsible duties. For Board members concurrently serving as Executive Officers, no compensation is paid for services provided as a Director of the Board.

Websites

Corporate Governance Guidelines  
<https://www.hitachicm.com/global/environment-csr/csr-en/company-en/governance-en/guidelines/>

Results Under the 8 Key Initiative Themes

The HCM Group is carrying out activities under eight key initiative themes, having identified three CSV themes where solutions to social issues equate to business growth and five core themes essential to the implementation of the three CSV themes.

CSV Theme1	Resolving global environmental issues	p31	Key Initiative2	Occupational safety and work style reform	p45
CSV Theme2	Enhancing initiatives to increase social infrastructure workforce	p35	Key Initiative3	Developing human resources globally and locally	p48
CSV Theme3	Contributing to community development	p39	Key Initiative4	Creating better business transactions and value chains	p51
Key Initiative1	Pursuing safe, effective, and sophisticated products and working environments	p43	Key Initiative5	Governance	p53

ESG Index

ESG	Key Issues	Key Initiative	Reference Page
Environment	Philosophy concerning the environment	Environment policy and long-term goals	p31
	Data relating to the environment	Performance Highlights	p21、p23
	Climate Change	Environment policy and long-term goals	p31
		Energy conservation activities at production plants	p32
	Waste	Waste reduction effect in the parts remanufacturing business	p33
	Water	Initiatives for water resource conservation	p33
	Biodiversity	Initiatives for ecosystem conservation	p34
	Chemical substances	Curbing emissions and preventing pollution	p34
	Products and Services	Environmental benefits of the ZH200-6 hybrid hydraulic excavator	p32
Social	Customer	Initiatives to realize the vision of "Made by Hitachi" uniform worldwide quality	p44
	Labor practices	Occupational safety and work style reform	p45 ~ p47
		Developing human resources globally and locally	p48 ~ p50
	Human rights	Human rights initiatives	p55
	Contribute to local communities	Contributing to community development	p39 ~ p42
Governance	Corporate governance	Corporate governance system	p54
		Management structure	p29
		Reinforcement of risk management	p55
	Information disclosure	Performance Highlights	p21 ~ p24
	Compliance	Compliance promotion systems and training	p56
		Response to environmental compliance	p56
	Supply chain management	CSR management in the supply chain	p52
	Philosophy concerning sustainability	Message from the President	p15 ~ p18
		Integrating Management Strategy and Sustainability	p7
		Sustainability Issues and Key Initiative Themes	p8
		Our approach towards SDGs	p9
		Key issues in the value chain	p10
		The Value Creation Process	p13、p14



## CSV Theme1

## Resolving global environmental issues

Global environmental issues including climate change are extremely important issues that could threaten the very survival of humankind. Solutions or adaptation to these issues requires inclusive global initiatives and in particular companies are expected to play an important role. The HCM Group is working to reduce the environmental impacts of its products throughout the entire life cycle and to provide environmentally conscious solutions to customers and society through ICT, IoT and open innovation.

Targets				Key Initiatives
CSV targets	Reference year	2030 reduction rate	2017 progress rate	
• CO <sub>2</sub> saving by products	2010	33%	46%	<ul style="list-style-type: none"> <li>• Reduce environmental impact for manufacturing processes</li> <li>• Develop and deliver Eco-Products, low carbon construction machinery, dismantling, and recycling machinery</li> <li>• Utilize ICT and IoT</li> <li>• Applications for disaster recovery and disaster prevention</li> <li>• Environmentally conscious mining operation solutions</li> <li>• Green infrastructure solutions</li> </ul>
• Fuel reduction of hybrid hydraulic excavators	2010	50%	80%	
• Improvement rate of energy basic unit in production	2005	40%	65%	
• Improvement rate of waste basic unit in production	2005	40%	83%	
• Improvement rate of water basic unit in production	2005	50%	86%	

## Progress of main activities in FY2017

## Development of clean technologies and environmentally conscious technologies

Worldwide greenhouse gas emissions continue to increase, and today they stand at levels more than 50% above those of 1990. The HCM Group continues to develop and put into practical use construction machinery with low carbon technologies such as hybrid machines and electric machines.



## Reuse and recycling of products

The world today must manage our planet's limited resources in responsible manner and use them efficiently. The HCM Group is actively promoting the efficient use of resources, including parts reuse and remanufacturing, through the development of technologies for product recycling and other means.



## Responses to water risk and biodiversity

Protecting water resources and ecosystems is a duty of companies that benefit from natural capital. The HCM Group is working to use water resources in a sustainable way and protect biodiversity, with our production bases around the world a focal point of our actions.



## Future initiatives

In response to our target of achieving a CO<sub>2</sub> saving rate by products of 33% compared to 2010 by 2030, in FY2017 we were at 46% of this target thanks to the provision of environmentally conscious construction machinery, including new hybrid hydraulic excavators. Looking ahead, we stand committed to actively contributing to solutions to global environmental issues by not only reducing environmental impacts across the three areas of "manufacturing," "using" and "taking on challenges," but also developing environmentally conscious technologies.

## Development of clean technologies and environmentally conscious technologies

## Initiatives to reduce electricity usage at production plants

HCM has worked on energy conservation initiatives for added value, efficient energy usage in order to increase energy productivity. Such initiatives include the effective utilization of unused energy, reduction of standby power, use of inverters, and shift to LED lighting.

In terms of reducing standby power at production plants, the introduction of "Emilia" electric power monitoring system co-developed with Hitachi, Ltd. makes it possible to ascertain and analyze electric power by focusing on production site needs. Through this solution, we are aiming for the more efficient use of energy. EMilia visualizes the electric power data of each facility at multiple manufacturing bases in real time, making it possible to analyze and diagnose future operating methods and energy productivity. This system reduces standby power through a combination of energy usage standardization within the energy

conservation functions of each facility and monitoring of power off. Additionally, this system results in higher efficiency operations by realizing more efficiency energy use.

In FY2017, we focused on the expansion of EMilia overseas. Hitachi Construction Machinery China analyzed the characteristics of electricity usage, including standby power due to forgetting to shut off machinery and standby power at the time of shift changes using data from EMilia, enabling it to build its own pattern for energy conservation management. The company is now working to completely eliminate its use of standby power.



Energy conservation liaison conference using EMilia

## TOPICS

## Initiatives at KCM Corporation Banshu Works

KCM Banshu Works used to continually heat the salt bath to prevent salt (nitrate) from losing heat and solidifying during the salt quenching\* method of heat treatment. However, starting in FY2017 it began efforts to optimize heating and stopping. As a result, Banshu Works reduced standby power by 135MWh annually, which corresponds to roughly one percent of the entire works' electricity usage.

\* Salt quenching is a form of heat treatment where molded parts are placed in a bath of melted nitrates (salt bath) that is then heated and cooled.



Salt bath at KCM Banshu Works

## Development of clean technologies and environmentally conscious technologies

## Released the ZH200-6 hybrid hydraulic excavator

Since releasing the first generation ZH200-A in 2011, the HCM Group has developed a number of next-generation hybrid hydraulic excavators that help to reduce environmental impacts.

The all-new ZH200-6 hybrid hydraulic excavator released in Japan in September 2017 comes equipped with the TRIAS-HXII system developed using a combination of our long-standing proprietary technologies coupled with the One Hitachi approach and technologies from open innovation. This system achieves impressive fuel economy while maintaining operability through the integrated control of the hydraulic system and hybrid system comprising the engine, electric assist motor, lithium ion battery, power control unit (PCU), and electric swing motor, in order to maximize the machine's performance. We co-developed the

all-new hybrid motor-mounted engine with Toyota Industries Corporation and lithium ion battery with Hitachi Automotive Systems, respectively. Utilizing technologies from the automotive and industrial vehicle fields, the ZH200-6 achieves a 12% reduction in fuel costs compared to the previous ZH200-5B hybrid hydraulic excavator.



ZH200-6 hybrid hydraulic excavator



Reuse and recycling of products

## Waste reduction effect in the parts remanufacturing business

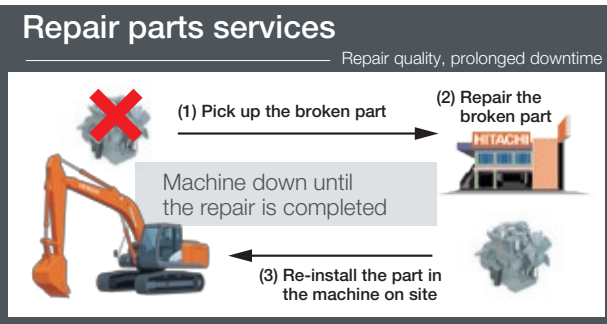
Parts replacement is essential for construction machinery used in harsh environments. By weight, construction machinery is made up of 80% to 90% steel. Therefore, if a problem occurs with a unit, there was no other choice than to replace it with an all-new one. For this reason, used units are handled as scrap and recycled after being melted down. However, repairing and reusing these units repeatedly instead of disposing of them as scrap not only reduces customers' running costs, but also results in even greater energy and resource savings. HCM's parts remanufacturing business was born as a result of matching these customer needs and our commitment to find solutions to social issues.

The parts remanufacturing business involves restoring the functions of used units collected from customers and re-selling

them as new remanufactured parts. Units are made from remanufactured parts, making it possible to provide a warranty similar to new parts. Unlike used units or repair parts, the parts remanufacturing business features a cyclical model in which a transition is possible from "recycle" to the higher priority "reuse" within the 3Rs.

The largest remanufactured unit is a dump truck decelerator, which weighs about 12 tons. This is the same as roughly 12 to 13 light motor vehicles, meaning there is a significant effect in terms of conserving resources and reducing waste. HCM has the technologies to remanufacture many other units as well. Our efforts at 12 locations around the world have helped to reduce waste by around 2,900 tons every year.

### Differences between our remanufacturing parts service and repair parts services



\* Core parts: Parts from which used components can be salvaged for remanufacturing and reuse. Core parts indicate those that are regularly replaced after being used for a targeted time interval when operating a machine under a preventive maintenance program.

Responses to water risk and biodiversity

## Initiatives for water resource conservation

The HCM Group uses the World Resources Institute's (WRI) Aqueduct tool to determine areas within its business activities with a high level of water stress. We also utilize this tool to quantify the level of water stress for all of our production bases in Japan and abroad to identify high stress areas.

We are now deploying advanced water conservation activities at Tata Hitachi Construction Machinery Company Private Limited. (India), PT Hitachi Construction Machinery Indonesia, and Hitachi Construction Machinery Tierra in the area near Lake Biwa, where water risks are particularly high.

For example, Tata Hitachi Construction Machinery carries out de-silting work\* on a lake with the cooperation of local governments and educational institutions as an initiative to prepare for water shortages. At Tata Hitachi Construction Machinery Dharwad Plant, silt that collects on the bottom of a lake is re-

moved using the company's own hydraulic excavators, making it easier for rainwater to accumulate.

The greater water volume of the lake increases domestic water used by local residents and improvements along the lake shore have attracted wildfowl. Tata Hitachi Construction Machinery has received letters of appreciation from local residents and local governments detailing how the quality of life has improved.

\* De-silting work refers to the act of digging out and removing soil, etc., from the bottom of a port or river.



De-silting work by Tata Hitachi Construction Machinery

Responses to water risk and biodiversity

## Niju-maru Declaration on action to protect biodiversity

The Niju-maru Declaration refers to the commitment (participation in the program) to conduct initiatives that aim to prevent the loss of biodiversity as part of the Niju-maru Project launched by the Japan Committee for International Union for Conservation of Nature (IUCN). The Niju-maru Project invites participation from businesses and local governments through declaration to commit to what they can do to achieve the Aichi Biodiversity Targets, established at the Tenth meeting of the Conference of the Parties to the Convention on Biological Diversity (COP10).

HCM's Environmental Vision includes "harmonized society with nature," and as an action to protect biological diversity we have joined the Niju-maru Declaration. Until now, HCM has declared its intent to achieve targets 1 and 17. In fiscal 2017, additional declarations were made by Tadakiko for targets 1, 5, 7, 14, and 17, Hitachi Construction Machinery Tierra for targets 1, 4, 5, 7, 8, 10, 15, and 17, as well as Hitachi Construction Machinery (Shanghai) and Hitachi Construction Machinery (China)\* for targets 1, 4, 5, 7, 14, 15, and 17.

The No. 2 Works of Tadakiko is located adjacent to "Toyotomi Donguri no Mori" in Chiba Prefecture, where employees have been volunteering in forest landscape preservation (satoyama) activities including undergrowth mowing and thinning annually since 2012. Hitachi Construction Machinery Tierra has been conducting a variety of environmental initiatives including putting together biotopes (for organisms to share the same habitat), exterminating invasive species in Lake Biwa, and collecting used food oil for reuse onsite after refining.

We will continue to promote activities as a company that consider ecosystems and in turn lead to their preservation.

\* See Page 42 for greening activities undertaken in the Horqin Desert of China.

Development of clean technologies and environmentally conscious technologies

## Management of chemical substances

The HCM Group strives to prohibit and reduce the use of harmful chemical substances from both finished products and manufacturing processes. We strive to reduce the emission of chemical substances into the air, water and soil that are difficult to reduce, as well as prevent pollution.

In December 2017, Hitachi Construction Machinery (China) completed work on a facility that combines an active carbon filter and RCO (VOC gas cleaning and deodorizing system), which is expected to treat more than 75% of VOCs. This treatment equipment began operation in FY2018. Furthermore, another facility which involves the combination of Zeolite absorber/condenser and RTO (heat storage type deodorizing system) and can treat more than 90% of VOCs is scheduled to be installed in the second half of FY2018.

### The 20 Aichi Biodiversity Targets



\*ABS (Access and Benefit-Sharing): the fair and balanced distribution of profits resulting from the usage of genetic resources.



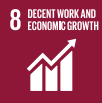


VOC gas cleaning and deodorizing system at Hitachi Construction Machinery (China)

CSV Theme2

# Enhancing initiatives to increase social infrastructure workforce

Development of infrastructure promoting industrial development and underpinning more affluent lives, along with resource development for a stable supply of energy, both represent the critical first steps in building a sustainable society. The HCM Group harnesses a wide range of leading edge technologies, including remote monitoring technologies for construction machinery and unmanned work automation technologies, to tackle the many challenges faced on work sites, such as shortages of workers and skilled technicians.

Targets	Key Initiatives
<ul style="list-style-type: none"> <li>Contribute to enhanced site productivity for customers using ICT and IoT.</li> <li>Reduce life cycle costs and improve utilization rate of customer machinery.</li> <li>Improve the safety of machinery and prevent occupational injuries on site.</li> <li>Contribute to alleviating the shortage of skilled technicians through advancement of machinery and systems.</li> </ul>	<ul style="list-style-type: none"> <li>Provide solutions to optimize mining processes and management</li> <li>Achieve stable machinery operations and the reduction of life cycle costs</li> <li>Popularize machinery and systems that increase work efficiency</li> <li>Develop and delivery labor-saving machinery that is unmanned/uses robotics</li> </ul>

Progress of main activities in FY2017		
<p><b>Realizing a safe and productive work environment</b></p> <p>Realizing a safe and productive work environment through investment in technologies that mitigate human error and accident risks is essential in promoting employment that is rewarding. The HCM Group contributes to a productive work environment through the provision of machine technologies that can be safely operated by operators of different skill sets.</p>	<p><b>Innovative technological development that creates new value</b></p> <p>The structure of industry itself needs to be transformed through improved resource utilization efficiency and the introduction of environmentally conscious technologies based on innovative technological development. The HCM Group is meeting these needs with the support of our technology developed using the collective strengths of the Hitachi Group.</p>	<p><b>Building resilient infrastructure</b></p> <p>The SDGs aim to drastically reduce the number of fatalities and injured due to natural disasters by enhancing development plans on national and global level by 2030. HCM strives to contribute to the development of social infrastructure, including rivers and roadways, by providing higher efficiency products and services.</p>
		

Future initiatives

In FY2017, we delivered new products and new ICT/IoT-based solutions in order to address various challenges at work sites including improved safety, improved productivity, and reduced life cycle costs. Going forward, we will continue to address the various challenges faced by work sites, particularly real-life testing for the commercialization of an autonomous haulage system for dump trucks at mining sites as well as advancing solutions for site management optimization.

Realizing a safe and productive work environment

## Towards the Commercialization of an Autonomous Haulage System for Mining Trucks

Ensuring worker safety at mining sites where huge mining trucks operate is a major challenge. At the same time of ensuring safety, it is also necessary to streamline mine operations through total optimization leading to improved productivity and reduce life cycle costs. As one solution to this challenge, HCM offers an Autonomous Haulage System (AHS) for mining trucks.

AHS enables unmanned operation of mining trucks, which normally require the most manpower, at open-cut mining pits and provides integrated management using its control system. AHS is expected to minimize human error and improve safety, while yielding economic benefits, including reduce human exposure to Safety hazards, lowered personnel costs, increased hours of operation, and reduced fuel costs. HCM's AHS applies know-how and Hitachi's technologies in railway operation management, including block train control technology. Blockage management system divides the route mining trucks travel autonomously into multiple zones and permits only one truck per zone. Trucks haul autonomously within their permission zones without communicating with the control system, and only make contact with the system as they approach the next zone. The communication traffic volume is controlled to enable hauling permits to be given for each new zone. This fixes the issue of limits on the number of controllable mining trucks due to com-

munication traffic volume and allows more mining trucks to be controlled.

In FY2017, we performed various verification testing performed at a location in Australia aimed at commercialization. We plan to conduct user tests at customer sites in FY2018 and tests for commercialization in FY2019.

\* Open-cut mining pit: A method of mining where minerals are mined directly from the surface without digging a mine shaft.



Practical various verification testing aimed at commercialization will get underway in FY2019

Innovative technological development that creates new value

## Release of the ZX200X-6 Hydraulic Excavator, a Core Contributor to ICT Construction

In January 2018, HCM released the ZX200X-6 ICT hydraulic excavator, an all new addition to the ZAXIS-6 series and core ICT Construction solution. The ZX200X-6 features a proprietary system for ICT Construction that includes a machine guidance function indicating the location and position information of the machine and work target as well as Solution Linkage Assist, a machine control function that semi-autonomously operates the machine based on work target data.

The ZX200X-6 carries out work in a highly accurate and efficient manner thanks to its over-dig prevention function that controls the bucket so that it does not dig deeper than the work target and bucket angle hold mode that keeps the bucket at a pre-set angle. Compared to the previous ZX200X-5B, the ZX200X-6 offers better finishing capacity and improved workload by around 35% thanks to quicker work.

The ZX200X-6 also greatly increases productivity even on small sites and sites with no GPS signal because of its 2D capabilities. Furthermore, the machine can be upgraded easily

from 2D to 3D simply by adding a dedicated 3D device. This enables the ZX200X-6 to be used in a wide variety of regions and fields.



ZX200X-6



Innovative technological development that creates new value

## Solution Linkage Mobile - work site visualization tool

HCM developed Solution Linkage Mobile, offering work site visualization, progress management, and proximity notification functions, as one of the ICT Construction solutions of Solution Linkage for improving safety and productivity on construction sites. We began providing Solution Linkage Mobile services in Japan from April 2018.

Solution Linkage Mobile was developed based on the concept of making it easier to use IoT at work sites. This solution connects machinery and people at work sites using mobile terminals such as a smartphone. For example, a mobile terminal is installed on a construction machine or dump truck operating at the work site. Location information uploaded to the cloud through an application is used to plot the position of each machine on a map. Conventionally, site managers examined work arrangements after checking the situation by telephone or other means. Now with this solution, they can use work site visualization to see in real time the location of machines and people, making it possible to increase the efficiency of work.

In real-life testing with the cooperation of customers, this

solution improved work site productivity by around 10%. Productivity can be increased even further by linking this solution with ConSite, a service that conveys a machine's operating condition and breakdown information in a timely manner.



Solution Linkage Mobile's map screen. The location information and list of machines and workers with GPS receivers is displayed using icons.

Innovative technological development that creates new value

## Utilizing ICT Demonstration Site to experience ICT Construction and various solutions first hand

The HCM Group operates the Hitachi Construction Machinery ICT Demonstration Site in order for customers to realize the benefits of ICT Construction processes based on a clear understanding of i-Construction being advocated by Japan's Ministry of Land, Infrastructure, Transport and Tourism.

Opened in October 2016 at HCM's Hitachinaka Works, this area deepens customer understanding of i-Construction through demonstrations and training, ranging from surveying using unmanned aerial vehicles (UAV) and laser scanners to explanations of ICT construction machinery functions and technologies, and use of software for creating 3D data. Here, customers get to experience various solutions using the latest technologies of our business partners. In FY2017, around 1,400 customers visited this demo site.

Furthermore, in April 2018, HCM newly opened the Hitachi Construction Machinery Kagawa ICT Demo Site at the Shikoku Branch in Zentsuji City, Kagawa Prefecture, as the second demo site. The HCM Group will use these two sites to foster understanding among customers about the benefits of ICT Construction for greatly reducing conventional processes and increasing both safety and productivity. This will position us to deliver the optimal solutions to customers.



Demonstration using ICT construction machinery



Training for customers

Innovative technological development that creates new value

## First HCM official Apps "ConSite Pocket"/ "ConSite Shot" launched world wide

ConSite is a fleet management reporting service provided by HCM. Global e-Service system processes the telematic data automatically and provides to the customer a summarized monthly report. Also Customers may receive an alarm report in case the machine detects a serious condition. Data report supports customers by improving fleet management efficiency. HCM has provided data report in 33 languages since 2014. Currently ConSite data reports are provided to 113 countries & regions for 82,432 machines. (As of March 31, 2018)

In FY2017, HCM began offering a new app called "ConSite Pocket" for iPhone and Android to the data report subscribers. The app provides an easier usage and visualization of the reports than the emails. The users receive an alarm notification on the smartphone that makes the owner realize the machine status quicker. Also, the data report can always be checked by the user on the work site. In addition, HCM launched an app called "ConSite Shot" for official dealers to provide visual inspection reports to the customers. Mechanics of Hitachi dealers can easily create an inspection report with the assistance of Global e-Service. Machine owners can decide the required repairment by seeing the visual inspection report data together with the suggestion

from experts.

These apps dramatically increase the benefits of ConSite. HCM started providing these apps from February 2018 world-wide, aiming to provide more reliable solutions to our customers.



Screenshot of ConSite Pocket (left) and ConSite Shot (right)

Innovative technological development that creates new value

## ConSite OIL - 24-hour health monitoring of construction machinery

In October 2017, HCM began offering ConSite OIL in Europe ahead of its worldwide launch. This new solution utilizing ConSite's automated reporting system monitors the engine oil and hydraulic oil conditions of machinery in operation 24 hours a day and issues automated notifications to customers and service staff at dealers.

This solution analyzes engine oil and hydraulic fluid conditions of machinery, making it possible to understand the overall "health condition" of machinery, including not only oil conditions, but also the condition or breakdown of parts and components. Generally, oil is removed directly from the machine and sent off for analysis to monitor conditions, but ConSite OIL is able to monitor oil performance all time by using sensors. The Global e-Service is used to assess data on oil degradation or contamination based on indicators such as temperature, viscosity, density, and dielectric. When a reading out of the ordinary is detected, dealer staff promptly propose to customers the suitable maintenance, repair or parts replacement.

By innovating ConSite OIL, customers have increased their advanced detection rate of breakdowns occurring in their machinery from 20% to 37%. HCM is now working on developing

the next ConSite service following the success of ConSite OIL. Our ultimate goal is to increase the advanced detection rate to 90%.



ConSite OIL analysis report prepared automatically. Combining these with operating status reports from ConSite reveals details of machine usage.



# CSV Theme3 Contributing to community development

With operations around the world, the HCM Group interacts with a wide variety of local communities. In order for a company to continually grow, it must be committed to growing together with each of the communities where it operates while being mindful of the local culture. The HCM Group is aiming to realize a sustainable society through activities that capitalize on the unique nature of its business operations for the growth of both communities and the Group.

Targets	Key Initiatives
<ul style="list-style-type: none"> <li>Support the self-reliance of emerging countries through infrastructure development</li> <li>Create jobs in the local community through the parts remanufacturing business</li> <li>Support environmental activities in the local community</li> </ul>	<ul style="list-style-type: none"> <li>Develop machinery and human resources that meet regional requirements</li> <li>Support the development of overall community infrastructure utilized Hitachi Group integrated capability</li> <li>Provide financing and machinery to support infrastructure development</li> </ul>

Progress of main activities in FY2017		
<p><b>Build urban public works infrastructure</b></p> <p>The development of high quality social infrastructure in emerging countries is vital for achieving sustainable economy development. The HCM Group is contributing to sustainable cities and living spaces by providing various forms of ongoing assistance, in addition to supplying construction machinery used to make infrastructure.</p> <div> </div>	<p><b>Create local employment opportunities</b></p> <p>According to a study by the International Labor Organization (ILO), the number of unemployed worldwide stood at 201 million people*(as of 2017). The HCM Group is contributing to the creation of local employment by actively hiring local people for its parts remanufacturing plants in 12 locations around the world.</p> <p>* Source: The future of work - ILO</p> <div> </div>	<p><b>Energize global partnerships</b></p> <p>Innovation driven by global partnerships must be energized in order to achieve a sustainable society. HCM is now accelerating initiatives by harnessing the collective strengths of the Hitachi Group and by further reinforcing partnerships with outside institutions.</p> <div> </div>

<p><b>Future initiatives</b></p>	<p>In FY2017, we worked on developing human resources in local communities with the goal of growing our businesses together with communities. These initiatives included participation in the Manufacturing Skill Transfer Promotion Program being implemented through a public-private partnership involving Japan and India. Looking ahead, we will further strengthen partnerships with various stakeholders around the world and engage in activities that contribute to community development.</p>
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## Build urban public works infrastructure

### Participation in the Manufacturing Technology Transfer Promotion Program in India

The Manufacturing Technology Transfer Promotion Program supports the Government of India's manufacturing industry initiatives of "Make in India" and "Skill India" for the country's anticipated medium to long term economic growth, which is carried out in collaboration between governments and citizens of Japan and India, with the goal of developing 30,000 human resources in manufacturing over 10 years.

HCM supports the objectives of the initiatives of Japan and India as well as this program, and has announced its intent to participate through its Group company, Tata Hitachi Construction Machinery Company Private Limited. The plan is to establish a training center within Dharwad Plant, one of the three plants of Tata Hitachi Construction Machinery in India which boasts the latest facilities, as a Japanese Manufacturing School with the aim of training 30 manufacturing workers in three years through lectures and on-the-job training (OJT) in cultivating the future leaders of the industry.

The HCM Group hopes to contribute to the country of India, which is undergoing rapid economic growth, not only through provision of construction machinery including hydraulic excavators needed for social infrastructure development, but also

through cultivating human resources within India through its involvement in this program.



Dharwad Plant, Tata Hitachi Construction Machinery Company Private Limited.



On-the-job training

## Create local employment opportunities

### Internship program in Zambia

Hitachi Construction Machinery Zambia Co., Ltd. has launched a three month internship program for students at Northern Technical College (NORTEC) located in the northern Zambia starting January 2018. Each student was placed in the hydraulic, electrical, and mechanical departments for hands-on learning on the production floor. We are also considering the possibility of accepting interns from vocational schools in Lusaka, the capital of Zambia.

Moreover, Hitachi Construction Machinery Zambia supports the development of its employees with outstanding performance by paying for their qualification exams and school tuition. For example, two employees of the parts remanufacturing plant received their qualification as factory workers with the support of Hitachi Construction Machinery Zambia. These two employees were originally hired as general worker who had zero qualifications other than a high school diploma. Their devotion to work was recognized which made them eligible to receive financial support.

In this manner, Hitachi Construction Machinery Zambia contributes to the development of local communities through its involvement in the education and development of the future

generation and support for youth employment.



Interns on the job

Build urban public works infrastructure

Parts remanufacturing business with operations worldwide

Hitachi Construction Machinery has engaged in the parts remanufacturing business since 1970. This business involves collecting old parts that were replaced during machine repair work and then restoring them at our parts remanufacturing plants. Newly remanufactured parts are then sold to customers at a reasonable price after undergoing considerable quality assurance steps ensuring they are as good as new parts.

This parts remanufacturing service includes removing core parts from customers' machines on site and then replacing them with remanufactured parts already in stock. These used core parts are then brought back to one of our parts remanufacturing plants for remanufacturing, after which they are stocked in preparation for the next order. Therefore, compared to repair parts services where a broken part is brought back for repair and then reinstalled in the machine on site at a late date, our remanufacturing parts service helps to shorten the downtime of customers' machines. For this reason, our remanufacturing parts service is an ideal option for customers who want to maintain a high utilization rate of their machines while keeping costs down as much as possible.

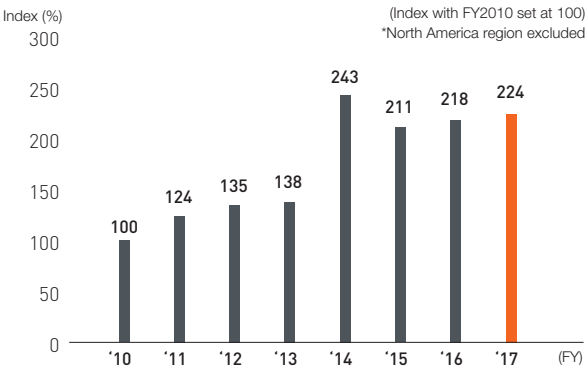
Additionally, our parts remanufacturing plants maintain technologies for reusing many parts that otherwise would be discarded. This greatly reduces the amount of waste compared to conventional repair services. When customers elect to use our remanufacturing parts service, they are helping to alleviate environmental issues, including climate change.

Furthermore, we gather information on core parts and share this with development-related departments in an effort to con-

stantly improve the quality of our products. Typically, the manufacturer is responsible for any defects that occur during the warranty period, so most of the market information that is provided to development-related departments is within the warranty period. Conversely, there is a shortage of information on product faults after the warranty period. Amidst this, a majority of the core parts handled by our remanufacturing parts service are out of warranty, so we are able to provide various detailed and quantitative data to development-related departments, enabling us to improve the quality of our products and utilize this data in the development of next-generation models.

In this manner, we now engage in the parts remanufacturing business, which generates a great deal of value for society and the environment, too, at 12 of our manufacturing bases around the world, as of March 31, 2018.

Sales of the parts remanufacturing business



Energize global partnerships

Supporting self-reliance in Cambodia through NPOs

Known as the country with the highest density of landmines in the world, Cambodia and its people still suffer from injuries and fatalities from landmine accidents even though its civil war is long over. The HCM Group has been donating to Good Earth Japan (GEJ), an NPO, since FY2007 to support the self-reliant living of local residents in Cambodia. GEJ is involved in promoting and improving farming technologies by providing agricultural training as well as infrastructure development, including roads and irrigation ponds, to improve the living environment. In addition, it also plays a role in advancing education in the country.

In June 2017, a dormitory for teachers was built next to the primary school of Prahop in Battambang Province with the financial support of GEJ. The primary school was constructed in 2010 but due to its poor traffic access for commuting, teachers had been using one of the classrooms as their office and dormitory. As such, for several years now GEJ has received re-

quests to build a teachers' dormitory. HCM cooperated with Hitachi Construction Machinery Tierra and Hitachi Construction Machinery Japan in donating a portion of proceeds from sales of mini-excavators to fund the construction project, making the plan come to fruition. The quality of education is expected to improve thanks to the new and improved work environment for the teachers.

In FY2018, we will continue to support regional development in Cambodia through our support in agricultural development, road improvement and maintenance, and school maintenance and management.



Commemorative photo taken in front of the teachers' dormitory

Energize global partnerships

Assistance activities at elementary schools in China

The municipal government of Heifei City in China's Anhui Province has been implementing the Hefei City Project Hope since 1992 to support philanthropy that benefits youth. Many companies endorse this project and to date a number of different activities have been carried out.

Since it was first established, Hitachi Construction Machinery (China) has been involved in activities that benefit society through this project. In particular, in the area of education, Hitachi Construction Machinery (China) has striven to create educational opportunities for children. These efforts include the construction of Hitachi Construction Machinery Songgang Xi Wang Elementary School in 2010 financed in part with an education fund donated to Hefei City, along with regular visits, the donation of educational supplies, and by providing hands-on learning programs.

In August 2017, Hitachi Construction Machinery (China) was given the Hefei City Project Hope award by the City of Hefei for these contributions to the community. Hitachi Construction Ma-

chinery (China) will continue to support the Hefei City Project Hope and provide assistance to youth, who represent our future.



Commemorative photo with Wang Wei-Dong, deputy secretary of the Hefei City government (center) (Representative from Hitachi Construction Machinery [China] fourth from the right)

The Hefei City Project Hope Award

Energize global partnerships

Desert afforestation activities in the Horqin Desert (China)

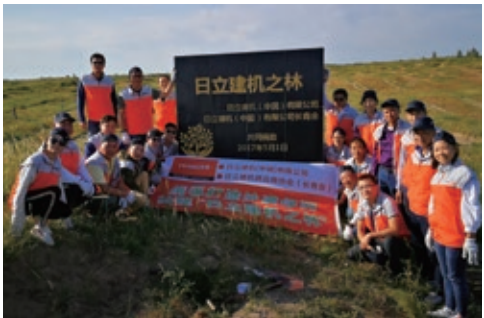
The Horqin Desert located in the Inner Mongolia Autonomous Region is the largest desert in China. Until about 20 years ago, most of the population lived a semi-agriculture and semi-animal husbandry lifestyle in which they farmed corn for animal feed while raising cows or goats on pasture land. However, the effects of drought completely transformed the once grassland into desert, resulting in serious issues such as a decline in agriculture and livestock productivity and growing damages caused by desertification.

The HCM Group began desert afforestation activities in the Horqin Desert in 2004 after endorsing the mission of the Green Network, an NPO. The first 10-year plan was launched by Hitachi Construction Machinery (China) in 2004, and by the end of this plan in 2014 vegetation had been planted on some 100,000m2 of desert land. Later, the second 10-year plan began in 2015, with the goal of planting vegetation on 130,000m2 of land in a separate area of the Horqin Desert. Since the start of this plan, Hitachi Construction Machinery (China) has been planting vegetation together with dealers to meet this goal. Furthermore, Hitachi Construction Machinery (China) is promoting the restoration of vegetation on another 100,000m2 of land together with suppliers as the third 10-year plan. The restoration of forest and vegetation on a cumulative total of 330,000m2 of desert land will preserve biodiversity and lead to greater CO2 absorp-

tion and resource circulation.

Over the many years of these activities we have built strong relationships with the local government and people. Local revitalization realized through these activities because of the involvement of local people in such work as fence building, planting and maintenance has also contributed to community development. Some wild green pheasants and foxes can be seen again in the location where these activities first took place, indicating that biodiversity has been restored as well.

The HCM Group will continue to promote desert afforestation activities in the Horqin Desert in order to resolve regional environmental issues and to balance improved quality of life with sustainability.



Volunteers






## Key Initiative Theme 1

## Pursuing safe, effective, and sophisticated products and working environments

In 1950, HCM became the first to mass produce a mechanical excavator using purely Japanese technologies. With our excellent technical capabilities as a foundation, we continue to deliver innovative, highly reliable products that can resolve worldwide social issues. We constantly listen to the voices of customers so that we make construction machinery that is safer and more efficient for workers, and we are working collectively as a group to further increase site productivity.

Targets	Key Initiatives
<ul style="list-style-type: none"> <li>Realize the vision of “Made by Hitachi” uniform worldwide quality</li> <li>Develop talented manufacturing technicians</li> <li>Improve service support capabilities</li> </ul>	<ul style="list-style-type: none"> <li>Develop technologies to secure safety and quality and to differentiate</li> <li>Provide accurate information on products and services</li> </ul>

## Progress of main activities in FY2017

Expand technological innovation	Disclose information to consumers	Transfer technologies through education
<p>Continuous investment in technological innovation essential to the development and improvement of social infrastructure represents a vital element in sustainable economic growth and development. The HCM Group is working to develop technologies to differentiate itself, while securing safety and quality, to raise competitiveness through resource efficiency and improvements in environmentally friendly technologies.</p>	<p>Supplying products and services that are safe and environmentally friendly, along with conveying the correct information to consumers in an easy-to-understand manner, is vital in building sustainable forms of production and consumption. The HCM Group is endeavoring to further reinforce its customer-first quality assurance system recognizing that the above is an important responsibility of a construction machinery manufacturer.</p>	<p>High quality education and opportunities for lifelong learning must be accessible to everyone around the world. The HCM Group promotes increased technical levels inside and outside Japan, along with global, high quality technical and occupational training, regardless of nationality, age or gender, in order to supply products that meet the needs of each country and region in a timely manner.</p>
		

## Future initiatives

In FY2017, we focused efforts on “Global Monozukuri Diagnosis” activities and promoted improvements in the quality control system under the vision of “Made by Hitachi” uniform worldwide quality. Looking ahead, we will continue to work on advancing human resource development and support activities in order to pass down our accumulated technologies and use the initiatives of the Tsuchiura Works (the mother plant for the HCM Group) at our overseas location as well.

## Expand technological innovation

## Initiatives to realize the vision of “Made by Hitachi” uniform worldwide quality

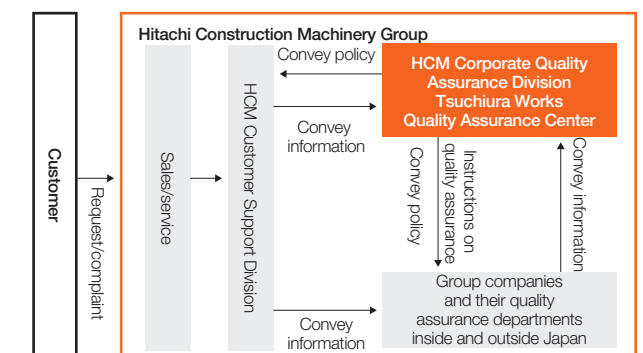
The HCM Group is committed to delivering the same standard of safety and quality of products manufactured at all of its production sites around the world under the keywords “Made by Hitachi” through various efforts so as to supply products that truly deliver peace of mind.

Our quality assurance system is headed by the Quality Assurance Center established at the Tsuchiura Works (the mother plant for the HCM Group) under the Corporate Quality Assurance Division. The center provides practical instructions and support to the quality assurance departments of HCM Group companies. The Corporate Quality Assurance Division oversees the quality assurance operations of all production sites inside and outside of Japan, which ensures the entire HCM Group delivers and improves upon the same uniform level of quality to achieve the Made by Hitachi vision.

In addition, the Corporate Quality Assurance Division collects and summarizes customer feedback and requests, comments from the sales and service frontlines as well as product deficiency information through the quality assurance division of

each Group company. These are in turn reported at the monthly Product Improvement Meeting chaired by the President in order to investigate causes as well as discuss and propose measures to prevent their recurrence. Results are then applied to all products.

## Quality assurance system of the Hitachi Construction Machinery Group



## TOPICS

## Employee education in FY2017

We conduct a variety of employee education and assistance activities with the aim of standardizing quality assurance levels across the HCM Group inside and outside of Japan. We hold educational seminars to instill general knowledge on quality control including the Quality Control Course (Beginner/Intermediate), Reliability Engineering, and Product Safety/Product Liability Course. Moreover, the Global Quality Assurance Technician Training Program, which hosts trainees from overseas Group companies at the Tsuchiura Works to learn about quality control, has graduated 20 trainees to date. Currently, six trainees are undergoing training at the Quality Assurance Division at Tsuchiura Works over a one- to three-year period. Also, during Global Monozukuri Diagnosis activities in FY2017, a diagnostic technician for each of the processes at Tsuchiura Works, from assembly, machining, can manufacturing, painting, and quality control, visited 12 production sites around the world to visualize vulnerabilities in each of these sites' manufacturing capabilities and quality control through diagnosis, and provide assistance for improvement to promote the realization of Made by Hitachi.

## Transfer technologies through education

## International Skills Competition

The International Skills Competition is held annually in order to enhance skill levels across the HCM Group and secure a higher level of quality.

In FY2017, the 14th HCM Group International Skills Competition was held for two days on November 7 and 8, 2017 at the Kasumigaura Institute. A total of 78 people who won the earlier qualifying round took part in the competition to demonstrate their skills honed through daily practice. Participants represented 17 HCM Group companies and partners inside and outside of Japan (including 23 from five overseas production sites in China, India, Indonesia, the Netherlands, and Russia).

The competition included a total of eight events; namely welding, painting, measurement, assembly, transport, process-

ing, and welding robot, in addition to facility maintenance which was launched as a new official event in FY2017. The results indicate there is the growing number of winners from overseas production sites in each event, demonstrating the strong outcomes of the Made by Hitachi vision.

Going forward, we will look to inject new excitement into such opportunities so as to improve the technical level of each site further and work toward enhancing product quality and safety.



Welding contest

## Key Initiative Theme 2

## Occupational safety and work style reform

Every company maintains the important duty of protecting its employees from occupational injuries and health problems. In addition, creating a safe and secure work environment enhances corporate value. The HCM Group is exploring work styles that are more efficient and highly productive and promoting workplaces where its diverse workforce can fully contribute its skills, under the basic philosophy of giving priority to safety and health in everything we do.

Targets	Key Initiatives
<ul style="list-style-type: none"> <li>• Make efforts to completely eliminate occupational injuries</li> <li>• Increase the number of business sites with OHSAS 18001 (occupational health and safety management system) certification</li> <li>• Reduce the total overtime of employees (indirect workers) to a monthly average of 15 hours or less by FY2020 (HCM non-consolidated basis)</li> <li>• Increase the average number of annual paid leave days taken by all employees to 17 or more days by FY2020 (HCM non-consolidated basis)</li> </ul>	<ul style="list-style-type: none"> <li>• A fair work environment</li> <li>• Global management for health and safety of employees</li> </ul>

## Progress of main activities in FY2017

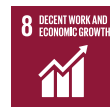
## Prevent occupational injuries

The SDGs request companies to protect the rights of all workers and promote a safe and secure work environment. The HCM Group is promoting occupational health and safety from various angles in order to realize a work environment that gives the utmost priority to employee safety.



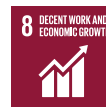
## Aid work-life balance

Achieving a comfortable and dynamic workplace while balancing professional and personal obligations is an issue not only faced in Japan but also in the international community. The HCM Group is promoting a productive workplace and rewarding employment by increasing the flexibility of work styles and working to curb overworking.



## Achieve employee health advancement

Consideration of employee health is an important issue for management for boosting productivity and increasing employee creativity. The HCM Group is promoting strategic approaches to employee health, recognizing that the management of employee health represents one of management's responsibilities.



## Future initiatives

The number of occupational accidents in FY2017 regrettably increased significantly compared to the previous year. We take this result very seriously, and will now work diligently to create a bright and healthy workplace free of injuries, with the elimination of occupational injuries one of the most important tasks for management. Specifically, we will increase each employee's safety awareness, ensure they comply with fundamental rules, and step up safety training for workers without substantial experience.

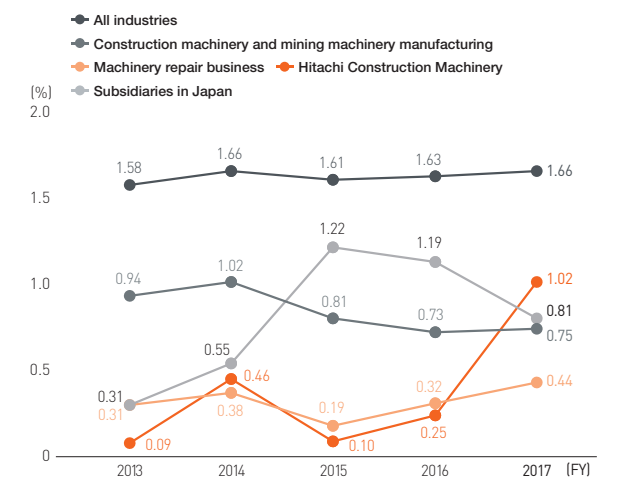
## Prevent occupational injuries

## Status of Work-related Accidents

There were 45 work-related accidents that occurred at Hitachi Construction Machinery in fiscal 2017, which marked an increase of 30 compared to the previous year. More than 60% of these accidents involved newer workers with fewer years of experience. As a result, we are carrying out emergency measures to review work procedures and improve safety patrols, among other solutions. There were 50 work-related accidents at our Group companies in Japan, and of these 19 occurred in manufacturing divisions and 31 in sales and services divisions.

Every day we are working diligently to ensure the safety of our employees, with safety the top priority under our basic stance of "prioritizing health and safety in every aspect of our work." However, we must now return to the basics to focus on further utilizing our occupational health and safety management system and reinforcing preventive safety based on risk assessments. At the same time, we will faithfully also implement safety measures taking into account past accidents as well as work to thoroughly eliminate the potential for accidents. The Hitachi Construction Machinery Group stands committed to raising the bar of its health and safety activities by carrying out health and safety audits globally, including at our subsidiaries outside of Japan.

## Frequency of lost-time-incidents (frequency rate\*)



\* Frequency rate: The number of incidents per 1,000,000 employee-hours worked. It is an indicator of the state of health and safety at a workplace. (These statistics only count lost-time-incidents of at least one day.)

## Aid work-life balance

## Initiatives for Work Style Reform

Work style reforms for the dynamic engagement of all citizens are being promoted in Japan as a national initiative. Work style reforms tend to focus on prolonged working hours, but these reforms must also be implemented from the perspective of developing an environment where workers can do their job efficiently while ensuring their health.

The HCM Group is working to create a comfortable and dynamic work environment that further utilizes human resources with various values, while ensuring that each and every employee can use their limited time to the maximum effect. In a message from top management released in January 2018 entitled "Launch of Work Style Reforms," President declared HCM will review conventional work styles together with employees and create a healthy and dynamic work environment conducive to the growth of individual employees and the company.

Specific measures include promoting work style reforms through the use of IT tools and the introduction of novel technologies such as Robotic Process Automation where burden-

some processes are automated using robots. In addition, we will continue to promote improvements in the employment environment and carry out reviews of office layout and introduction of a free-address system, along with trial introduction of teleworking (working from home or a satellite office) to achieve more flexible work styles.



Poster on work style reform



Achieve employee health advancement

## Initiatives for health and productivity management

The HCM Group is promoting initiatives for health and productivity management to contribute to measures for the mental and physical health of employees and their families and for prolonging the healthy years of workers' lives. We believe that creating a healthy and comfortable environment that boosts work productivity and assists in health maintenance and advancement and where employees can contribute their skills is an important theme for management to address. In October 2017, we released a declaration on health and productivity management issued in the President's name. Health and productivity constitutes the very foundation of our recent initiatives for work style reform and work-life management. We focus on making employees' work a healthy and comfortable everyday occurrence.

In FY2017, a working group of the safety and health committee took the lead in organizing the walking seminar (November 2017), inviting outside speakers to attend this event that incorporates the ideas and views of employees. In addition, a group walk was held (January to March 2018) in which departments formed teams that competed against one another in terms of the number of steps taken during a pre-determined period. We will continue to promote initiatives to prevent lifestyle diseases and for stopping smoking together with our Health Insurance Association as part of our ongoing actions to reinforce

and promote activities for health and productivity management.

In February 2018, HCM and Hitachi Construction Machinery Tierra were recognized under the 2018 Certified Health & Productivity Management Outstanding Organizations Recognition Program - White 500 (large enterprises segment) implemented by the Ministry of Economy, Trade and Industry and Nippon Kenko Kaigi.

\* "Health and productivity management" is a registered trademark of the Workshop for the Management of Health on Company and Employee.



Health and productivity management promotion members of Hitachi Construction Machinery Tierra

Achieve employee health advancement

## Addressing mental health

Recognizing the importance of mental health care, the HCM Group continues to carry out activities focused on four aspects of care based on the guidelines published by Japan's Ministry of Health, Labour and Welfare. We have conducted stress checks annually from before they were required by law. These checks have enabled us to raise awareness among employees about stress, create a comfortable work environment, and promote the use of hotlines staffed by professional counselors. In FY2017, stress checks were performed in November, with approximately 9,000 employees across the HCM Group in Japan receiving one. Stress checks represent an important initiative linked with our health maintenance and advancement measures and deeply correlated with measures to prevent overwork and provide appropriate solutions and guidance by physicians.

Additionally, we strive to carry out activities with an eye on both employees and their families, including self-care training targeting all employees, line-care training for managers including discussions on improving the workplace, support for employees

returning from leave, and health counseling support, including for families, through the Employee Assistance Program (EAP).

Our employees represent an irreplaceable asset. Going forward, we will aim to become a company where all of its employees can work in a healthier and more comfortable environment, and we will strive to improve the overall quality of industrial health, including mental health care.



Self-care training in progress

Learning materials handed out during self-care training

## Key Initiative Theme 3

# Developing human resources globally and locally

It is becoming more difficult for companies to secure the human resources they need due to the diversification of work styles and changes in values, among other factors. Under such circumstances, developing human resources is essential for raising productivity. The HCM Group is now promoting various initiatives aimed at developing both global human resources who can play an active role around the world and local human resources who can carefully respond to the needs of local markets.

Targets	Key Initiatives
<ul style="list-style-type: none"> <li>Develop human resources development system that takes into account local cultures and business practices</li> <li>Expand educational opportunities for developing global human resources</li> <li>Transform the diversity of our workforce into an engine of organizational growth</li> </ul>	<ul style="list-style-type: none"> <li>Management localization</li> <li>Development and recruitment of local human resources</li> <li>Global personnel management leveraging diversity</li> </ul>

### Progress of main activities in FY2017

#### Provide educational opportunities to learn technologies

Providing fair and high quality educational opportunities to all is the most valid and effective means for sustainable growth. The HCM Group is working to expand education and training systems for the entire Group both inside and outside of Japan.



#### Empower women in the workplace

Even today women around the world continue to face discrimination. This has made ensuring women's greater participation and opportunities for equal leadership a challenge. The HCM Group is promoting measures for development an employment environment where women can work a great deal of motivation.



#### Promote diversity

To realize a sustainable society, it is important to create an environment where all people can contribute their skills and abilities, regardless of age, gender, disability, nationality or ethnicity. The HCM Group is working on initiatives recognizing that achieving diversity is an important task of management.



#### Future initiatives

In FY2017, we implemented a Succession Plan as an ongoing initiative. Additionally, we endeavored to develop global and local human resources through various educational and training programs. Human resources development for raising productivity is a common challenge both inside and outside of Japan and across departments. Looking ahead, we will work to expand educational opportunities and enhance educational programs.

Provide educational opportunities to learn technologies

Implementation of succession plan

We introduced a succession plan in 2011 and today it applies to the entire HCM Group. The purpose of the succession plan is to share processes for utilizing human resources across every organization of the HCM Group so that the right person is assigned to the right place globally. With a medium- to long-term vision, we plan successors to current managers, identify what these successors are missing in terms of fulfilling their future duties, and how to train and educate these successors, after the heads of each company and department identify the requirements to fulfill the duties of their respective organizations. In turn, the duties and career path of each individual employee of the HCM Group can be visualized across the entire organization. This approach enables us to utilize human resources strategically.

The key to implementing this plan is the development of

successors. Toward this end, the HCM Group in Japan has actively hosted human resources from overseas Group companies to train and develop the successors of the tomorrow. We launched this initiative in earnest in 1996 and over the past eleven years around 240 employees from overseas Group companies have come to Japan for training. As of May 2018, 32 such employees (excluding technical interns) were in Japan undergoing training. Since April 2016, we have hosted manager-level employees from overseas Group companies.

By continually implementing this initiative, our goal is to develop human resources who share the same value of the Kenkijin spirit and play an important role at our operations around the world. Eventually, these people serve as executives in charge of the business strategy of our overseas operations, which will also help us pursue management localization.

Overview of our global human resources strategy



Empower women in the workplace

Developing female instructors at training centers

Hitachi Construction Machinery Training Center have been established at 15 locations and branches in Japan in order to facilitate construction machinery related technical training, special classes, as well as health and safety learning. We are now working to develop female instructors.

One reason is that in recent years a growing number of women are operating machinery, such as part-time employees driving forklifts at supermarket warehouses, and as a result, the number of female trainees is on the rise. At the same time, many of these female trainees worry about their ability to acquire the certification they are studying for. Male instructors do not always pay attention to fine details, while female instructors can provide

female trainees with a sense of security, and therefore there is growing demand female instructors.

Moreover, each training center strives to promote a female-friendly environment for the trainees, which aims to both foster female instructors as well as cultivate more female technicians.



Female instructor playing an active role at the training center

Provide educational opportunities to learn technologies

Education and training programs for developing global human resources

HCM has developed various education and training programs in order to develop global human resources. For example, in terms of linguistic training (English), TOEIC tests are regularly held within the Group to assess employees' English ability, as well as to provide the opportunity for employees to hone their skills through practical group training and correspondence courses.

The Marketing Sales Support Program (MSSP) is designed for employees of overseas dealers in charge of sales to learn about the behavioral process of machine sales and parts sales from the delivery of new machines and service parts to follow up services; thereby, developing local human resources who can incorporate these frontline needs.

In addition, other education programs categorized by rank and skill type are made available to enhance the cultivation of global human resources. These include Overseas Trainer Edu-

cation and e-learning on Products for Domestic and Overseas Sales Personnel, which are aimed at further developing global human resources.



Group work during MSSP

Provide educational opportunities to learn technologies

Activities to develop global production engineers

The HCM Group regularly hosts training for domestic and overseas production sites at Tsuchiura Works (the mother plant for the HCM Group) in order to realize the "Made by Hitachi" vision to create products with the same uniform level of safety and quality at its production sites around the world.

This training program allows young production engineers from HCM Group companies around the world and Japan to undergo practical three-year training including process planning, rationalization, and jig design. The aim of the program is to cultivate global human resources as well as instill the philosophy of manufacturing embodied by the Tsuchiura Works in other production sites worldwide; thereby, spreading the manufacturing culture of the HCM Group.

Launched in 2008, the Global Monozukuri Human Resources Development Program has graduated 80 trainees who are now showing Kenkijin Spirit to applying what they have learned

in Japan to their workplaces in order to achieve the "Made by Hitachi" vision. In FY2018, eight new production engineers have joined the program with a total of 24 trainees currently receiving training.



Presentation of results and completion ceremony






# Key Initiative Theme 4

## Creating better business transactions and value chains

The business activities of the HCM Group, which offers diverse products and services around the world, are made possible with the support of many business partners and customers. With growing international interest in corporate social responsibility, the HCM Group shares its vision and policies on CSR with suppliers to promote CSR activities across the entire value chain.

Targets	Key Initiatives
<ul style="list-style-type: none"> <li>• Maintain a sound relationship with supplies and governments</li> <li>• Promote fair and free competition and ensure consumer interests</li> <li>• Prevent risks within the supply chain</li> </ul>	<ul style="list-style-type: none"> <li>• Suppliers and human rights</li> <li>• Fair sales partnerships</li> <li>• Fair procurement</li> <li>• Corruption prevention</li> </ul>

Progress of main activities in FY2017		
<p><b>Increase awareness of fair trade</b></p> <p>Rectifying unfair trade to promote open competition and protect consumer interests is a challenge around the world today. The HCM Group is focused on transaction audits and legal compliance training for employees to ensure fair and equal trade is practiced thoroughly.</p>	<p><b>Promote CSR throughout the entire value chain</b></p> <p>We expect our global business partners will urge not only their group companies but also their suppliers from around the world to undertake corporate activities with consideration for CSR. Going forward, we at the HCM Group will continue to distribute and promote the Hitachi Group's guidelines on CSR among our suppliers.</p>	<p><b>Promote sustainable consumption</b></p> <p>To attain economic growth and sustainable development, we must establish a sustainable pattern of manufacturing and consumption. The HCM Group strives to minimize the environmental impact of products throughout the life cycle by creating environmentally conscious products in promoting sustainable consumption.</p>
		

<p><b>Future initiatives</b></p> <p>In FY2017, we worked to prevent risks in the supply chain by revising the internal review process for new suppliers, in addition to requesting all of suppliers to comply with the Hitachi Group CSR Procurement Guideline. As business activities continue to expand globally, addressing procurement risks is considered an ongoing concern. In the future, we will continue to anticipate and minimize these risks.</p>
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Increase awareness of fair trade

### CSR Management in the Supply Chain

CSR management in the supply chain requires not only our own initiatives, but also the sharing of our CSR philosophy with business partners and their cooperation. HCM requires the suppliers to comply, using the “Hitachi Group CSR Procurement Guideline” which contains actions we would like suppliers to take regarding CSR. For new suppliers, we revamped procedures for in-house screenings in November 2017 in order to reinforce compliance efforts. These rigorous screenings are carried out on new suppliers and include provisions in consideration of environmental and social criteria, such as anti-bribery measures.

Furthermore, we ask that procurement partners who we regularly do business with to join the Chikuhou-kai (61 member companies\*) or the Tokiwa-kai (44 member companies\*) for the purpose of building and maintaining partnerships with procurement partners. Both of these organizations joint seminars to foster understanding about HCM policies as well as safety, quality and the environment. They also hold presentations on examples of rationalization, skills competitions, and safety patrols led by members from both organizations.

We promote CSR activities across the entire supply chain

through the continuation of these measures.

\* As of April 2018

#### Websites

Hitachi Group CSR Procurement Guideline  
[http://www.hitachi.com/procurement/csr/csr/\\_icsFiles/afiedfile/2018/06/07/HITACHI\\_GROUP\\_CSR\\_PROCUREMENT\\_GUIDELINE.pdf](http://www.hitachi.com/procurement/csr/csr/_icsFiles/afiedfile/2018/06/07/HITACHI_GROUP_CSR_PROCUREMENT_GUIDELINE.pdf)



Joint seminar in progress

Promote sustainable consumption

### Reinforcement of used equipment distribution for value chain business

From April of 2017, Hitachi Construction Machinery (HCM) launched “The used equipment remarketing solution service” for trade-in of HCM products in Japan and a modification to meet the local emission standards and fuel quality for each country and region, where Japanese used equipment redistributed, through a consolidated subsidiary, Hitachi Construction Machinery Japan, that engages the construction equipment sales, service and rental business.

Currently, most of construction machineries operated in Japan equip the diesel engine and its peripheral equipment that is designed to use ultra-low-sulfur diesel (ULSD: sulfur content is 15 parts per million [ppm] or less), which conforms to 2011 standards of Japan's Act on Regulation, Etc. of Emissions From Off-highway vehicles. Therefore, operating the used construction equipment generated from Japan in the area where ULSD is difficult to obtain may have a great possibility of engine trouble. Accordingly, in order to reduce the engine trouble risk when the used equipment is operated and to conform to local standards and regulations, we will remove the emission gas after-treatment device and rewrite the software of the used construction equipment as these are delivered to each market.

Consequently, this service often involves delivering a finely tuned and customized machine for customer's applications or specifications, which also assist to improve the technical capabilities of local dealers. We offer varieties of proposal other than new machine deals which also help us to enhance our value chain business.



To the top page of HCM Used Website  
<https://www.hitachicmused.com/>

## Key Initiative Theme 5

# Governance

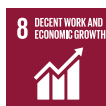
In order to enhance competitiveness as a company and enhance corporate value over the long term, it is crucial to accurately understand global trends and shifts in management environment as well as establish a structure for decision making. The HCM Group is strengthening its governance system in order to establish a structure to promptly and reliably execute management strategies as well as realize a fair and transparent management style.

Targets	Key Initiatives
<ul style="list-style-type: none"> <li>Establish a fair and highly transparent organizational framework</li> <li>Respect international principles on human rights</li> <li>Respond to diversifying global risks</li> <li>Instill and establish awareness of compliance</li> </ul>	<ul style="list-style-type: none"> <li>Strengthen global governance</li> <li>Management transparency</li> <li>Fair tax strategies</li> <li>Risk management, including ESG</li> </ul>

### Progress of main activities in FY2017

#### Promote a safe and secure work environment by strengthening organizational capacity

As businesses expand overseas, it has become even more important to build a secure work environment and exercise diligence towards human rights at overseas production sites. The HCM Group encourages hiring locally as well as commits to creating a system of human rights education following the Hitachi Group Human Rights Policy.



#### Build a resilient infrastructure through risk management

As the globalization of business advances, the risks surrounding companies are also becoming more diversified including natural as well as man-made disasters (terrorism and disturbances). The HCM Group is enhancing its global management system by anticipating various risks.



#### Address risks of climate change

To minimize the damage brought on by climate change, it is important to foresee, analyze, and promptly address such impacts. The HCM Group is making efforts to establish environmental compliance in order to reduce environmental risks and improve environmental values within its business activities.



#### Future initiatives

In FY2017, we newly introduced a safety confirmation system for all HCM Group companies in Japan to prepare for a large-scale earthquake or other disaster. We have published a new guidebook to promote the instillment and thorough implementation of compliance. Governance is an area that must be continuously implemented and strengthened. Going forward, we will continue to strengthen our governance system.

Promote a safe and secure work environment by strengthening organizational capacity

### Corporate governance system

As a member of the Hitachi Group, the HCM Group shares Hitachi, Ltd.'s Basic Philosophy and Conduct guidelines and stipulates its own codes of conduct in line with them. The HCM Group positions this code of conduct as the basic policies on corporate governance.

The HCM Group has adopted a corporate organizational system based on the structure for a company with a nominating committee, etc., as defined in the Companies Act. We have greatly strengthened our system of corporate governance through this separation of management oversight from business execution. The Board of Directors comprises ten (10) Directors, of which three (3) are Outside Directors (two [2] male and one [1] female). The Representative Executive Officer and other Executive Officers, who are authorized to do so by the Board of Directors, have the right to make operational decisions and execute work in accordance with the company's basic management policies. The Board of Directors determines the responsibilities and duties of the Executive Officers, matters regarding supervision and authority, and the mutual relationships among the Executive Officers. An Executive Committee (convening twice a month, in principle), comprising all the Executive Officers has been established as a consultative organ for the Representative Executive Officer, President and Executive Officer in making business decisions. The Executive Committee exercises control regarding important matters related to the company's operations.

#### Ensuring constant independence from the parent company

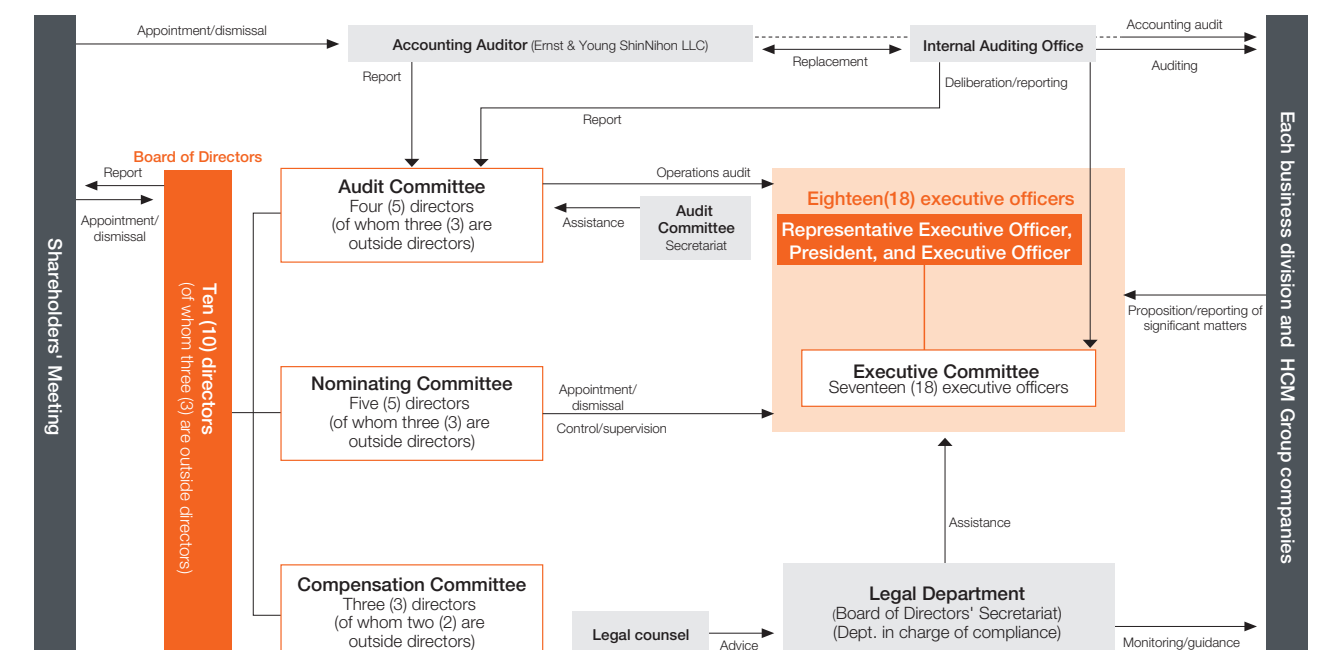
Since one (1) of Hitachi Construction Machinery's ten (10) Directors also concurrently serves as advisor to Hitachi Ltd., the parent company is able to exert influence on decisions on our management policy through the views expressed by this director at Board meetings. Nevertheless, the other nine (9) directors do not serve concurrently in executive or other positions at Hitachi Ltd. and there are three (3) outside directors who have been reported to the Tokyo Stock Exchange as independent officers. Therefore, we are in a position to be able to make our own management decisions. Also, terms and conditions of transactions with Hitachi Ltd. and its group companies are determined reasonably based on mutual discussions referencing market prices and other factors.

#### Websites

Corporate Governance Guidelines

<https://www.hitachicm.com/global/environment-csr/csr-en/company-en/governance-en/guidelines/>

#### Corporate governance system (as of June 25, 2018)





Promote a safe and secure work environment by strengthening organizational capacity

## Human rights initiatives

The HCM Group carries out human rights initiatives following its policies on human rights explicitly stated in the HCM Group Codes of Conduct and the HCM Group Human Rights Policy.

We continually implement education concerning human rights included in rank-specific training for new employees and new section managers, among others, for the purpose of improving each individual employee's awareness of human rights. In addition, we conduct training concerning harassment during our compliance training in order to create workplaces that are sound and comfortable.

### Results of human rights training in fiscal 2017

	Participants in training during fiscal 2017	Number of participants that are section manager or above	Number of participants that are general employees	Number of harassment training sessions
Hitachi Construction Machinery <sup>*1</sup>	269 persons	37 persons	232 persons	203 persons
HCM Group companies <sup>*2</sup>	1,714 persons	288 persons	1,426 persons	664 persons
Total	1,983 persons	325 persons	1,658 persons	867 persons

<sup>\*1</sup> The number of HCM participants are participants of rank-specific training  
<sup>\*2</sup> Group companies are the total for the 10 domestic companies

Build a resilient infrastructure through risk management

## Strengthening our risk management system

The HCM Group is working to reinforce our business continuity plan (BCP) and business continuity management (BCM), so that when faced with a risk, such as natural disaster or accident, we are able to minimize the impacts on our business activities and restore operations as soon as practical.

In FY2017, we newly introduced a safety confirmation system for all HCM Group companies in Japan to prepare for a large-scale earthquake or other disaster. With employee safety in mind, this system can check the whereabouts and condition of employees at any time during a disaster. We also conducted a training drill using this system based on the scenario of an actual disaster. In FY2018, we will increase the frequency of training in an effort to facilitate the confirmation of employee safety using the system.

Also, the HCM Group is working to strengthen its risk management system across the entire Group in order for it to grow as a truly global corporation. We are now working to prevent various types of risk and implementing measures against the risk after assigning priority based on the impact and frequency of each risk. As a way to avoid risk overseas, we continuously monitor for incidents and disasters and issue appropriate instructions to employees traveling on business and expatriate workers.

Going forward, we will continue to heighten awareness of crisis management across the entire Group and take steps to strengthen our risk management system.

### Measures against risks

1. When a risk arises, we will implement initial measures immediately. We will promptly ascertain the risk level and decide the range of the people to be informed, according to the severity of the risk.
2. We will make constant efforts to raise the awareness of employees and other relevant persons to ensure that they recognize risks as risks, thoroughly understand the importance of compliance, proactively work to prevent the occurrence of risks and scandals, and take proper measures to cope with risks when they occur.
3. When a risk arises, or there is the possibility of such, no matter how minor the risk is, we will immediately report the matter to a superior or to the Compliance Promotion Department manager.
4. We will regularly check risk potentialities and take measures to prevent the occurrence of each risk.
5. We will always endeavor to maintain good relations with the local community (including police stations, labor standards inspection offices, fire stations, public employment security offices, local residents, etc.).

Promote a safe and secure work environment by strengthening organizational capacity

## Compliance promotion structure and training

The HCM Group's compliance promotion structure is headed by the Compliance and Risk Management Division, which is in charge of compliance activities for the entire HCM Group. Meetings of the Compliance and Risk Management Division are convened regularly to review, plan, and evaluate the results of various compliance measures. It also works on prevention of misconduct by deliberating on the effectiveness of measures for preventing the recurrence of misconduct. We establish a Compliance Promotion Officer and Compliance Manager at each Group company and promote compliance activities in coordination with the Compliance Promotion Center of HCM's Legal Department.

Also, we provide a variety of training programs to raise awareness about compliance across the entire HCM Group.

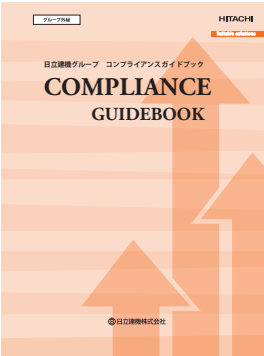
We provide e-learning on the topics of codes of conduct as well as anti-corruption and compliance with competition laws to executive officers, employees, temporary employees in Japan and overseas managers. In FY2017, a total of 5,411 employees from across the HCM Group took the course of e-learning.

Also in FY2017, we published the new Hitachi Construction Machinery Group Compliance Guidebook, which we distributed to executive officers, employees and temporary employees including at HCM Group companies in Japan. The purpose of this publication is to systematically explain compliance from the basics to awareness and organizational functions, as well as to

make the HCM Group's unwavering commitment in its Compliance Policy known to all. In FY2018, we plan to publish English and Chinese language versions of this guidebook for use at overseas Group companies.

### Websites

Hitachi Construction Machinery Group Codes of Conduct  
<https://www.hitachicm.com/global/company/company-profile/conduct/>



Hitachi Construction Machinery Group Compliance Guidebook

Address risks of climate change

## Response to environmental compliance

The HCM Group is strongly committed to environmental management. We have set our own voluntary environmental management standards that are stricter than laws and regulations in consideration of the environmental impacts caused by our business activities. Each of our business sites regularly measures water quality, noise and other indicators in an effort to reduce environmental risks. Also, whenever new facilities are introduced, we check relevant laws and regulations on the environment in advance and have a system in place to ensure compliance with laws and ordinances.

Mutual understanding among employees concerned established through communication is important to promoting environmental compliance. The HCM Group regularly provides on-site guidance at Group companies and organizes environmental exchanges. In FY2017, environmental managers from Hitachi Construction Machinery (China) visited the Tsuchiura Works where they discussed environmental management.



Discussion among environmental managers

# Financial Information

## Management's Discussion and Analysis

### Business Performance

The HCM Group is implementing the management measures laid out in CONNECT TOGETHER 2019, our mid-term management plan launched in FY2017. We are also working to develop and supply Solution Linkage services, a name we have given to solutions that use ICT and IoT to improve safety, improve productivity, and reduce life cycle costs, each of which are challenges facing our customers.

Furthermore, as part of our ongoing efforts to deepen the value chain and boost earnings outside of new machinery sales, we are working to reinforce the parts and service business in terms of after-sales services for machinery and mining facilities offered by H-E Parts and Bradken, which we acquired in the previous year. At the same time, we are working to strengthen our global support system as well as reinforce our management structure and raise efficiencies by increasing market share and lowering costs.

With respect to construction machinery, demand for hydraulic excavators during the fiscal year under review exceeded that of last year in every region, except the Middle East. The HCM Group is working to reinforce its parts and service business as well as boost earnings by expanding its parts supply system and rolling out ConSite service solutions globally that provide comprehensive support to customers and their machines. As for ConSite, we added ConSite OIL, the construction machinery industry's first breakdown prediction tool for engines and hydraulic equipment that uses sensors to monitor oil condition remotely, to the menu, and launched services in Europe in October 2017. In Japan, as a response to i-Construction advocated by the Ministry of Land, Infrastructure, Transport and Tourism, we are promoting the spread of ICT-powered work through training sessions at our ICT Demonstration Site opened in Hitachinaka City, Ibaraki Prefecture, and by providing solutions to make work processes more efficient.

For mining machinery, demand greatly outpaced the previous year amid growing investments by mining companies. The HCM Group is working to increase sales of its AC-3 Series of rigid dump trucks that feature an advanced stability control system developed with the power of the Hitachi Group. We are also delivering solutions to raise the efficiency of mining operations, including fleet management systems for mining machinery and the development of an autonomous haulage technology. Additionally, we are making efforts to build a more advanced customer support system and boost sales revenue of parts and services.

As for the solutions business, it comprises H-E Parts, which provides service solutions, and Bradken, which engages in the after-sales parts service business for mining facilities and equipment. Both of these companies became consolidated subsidiaries last fiscal year. Consolidated revenue for FY2017 (prior to

inter-segment adjustments) was ¥92,638 million and adjusted operating income was ¥2,425 million, owing to strong sales revenue from mining equipment in Australia and South America. Adjusted operating income is after deducting the 5,402 million yen in amortization due to the purchase price allocation (PPA) of H-E Parts and Bradken.

Consolidated revenue for the fiscal year 2017 (April 1, 2017 – March 31, 2018) was ¥959,153 million, up 27.2% year on year. This robust growth is the result of rising sales of construction machinery particularly in China along with an increase in sales revenue from the consolidation of H-E Parts and Bradken, which offset the impacts of Sumitomo Heavy Industries Construction Cranes Co., Ltd. becoming an affiliate under the equity method in the previous year.

As for each profit item, adjusted operating income rose 231.1% to ¥93,582 million, thanks to the reduced cost of sales ratio and SG&A ratio coupled with an increase in sales of parts and services and contributions from the solutions business. Operating income was up 305.3% year on year to ¥95,737 million and net income attributable to owners of the parent rose 648% to ¥60,004 million.

### Principles Regarding Appropriation of Earnings and Dividends for the Year under Review and the Fiscal Year Ending March 31, 2019

The HCM Group will maintain and strengthen its financial structure and work to bolster its internal reserves while considering implementation plans for upfront investments, including investments for technology development and facilities based on medium- and long- term business strategies. At the same time, HCM will pay dividends of surplus linked to its consolidated business results twice annually, comprising interim and year-end dividends, with a target payout ratio of around 30% or higher.

With the aim of enabling the execution of a flexible capital policy, Hitachi Construction Machinery will acquire treasury shares in consideration of necessity, financial conditions, and stock price movement.

With regard to the FY2017 year-end dividend, at the Meeting of the Board of Directors held on May 21, 2018, a resolution was approved for cash dividends per share of ¥49 with the record date of March 31, 2018. As a result, cash dividends for the entire FY2017 amounted to ¥85 per share. Dividends for FY2018 are to be determined.

## Consolidated Balance Sheets

(unit: millions of yen)

Item	Previous fiscal year (reference) As of March 31, 2017	Current fiscal year As of March 31, 2018
<b>Assets</b>		
Current assets	530,199	597,829
Cash and cash equivalents	65,455	81,929
Trade receivables	184,460	219,599
Inventories	235,522	255,623
Income taxes receivable	4,191	1,894
Other financial assets	27,626	28,029
Other current assets	12,868	10,342
Subtotal	530,122	597,416
Assets held for sale	77	413
Non-current assets	482,009	491,967
Property, plant and equipment	297,843	299,987
Intangible assets	40,088	37,748
Goodwill	36,640	35,016
Investments accounted for using the equity method	23,126	29,549
Trade receivables	31,279	41,392
Deferred tax assets	22,508	17,463
Other financial assets	19,354	20,148
Other non-current assets	11,171	10,664
<b>Total assets</b>	<b>1,012,208</b>	<b>1,089,796</b>
<b>Liabilities</b>		
Current liabilities	400,535	366,422
Trade and other payables	205,722	268,230
Bonds and borrowings	153,883	69,892
Income tax payables	4,063	11,000
Other financial liabilities	29,696	11,584
Other current liabilities	7,171	5,716
Non-current liabilities	161,243	218,344
Trade and other payables	21,604	18,839
Bonds and borrowings	94,818	160,773
Retirement and severance benefits	16,768	17,341
Deferred tax liabilities	19,025	11,314
Other financial liabilities	577	2,354
Other non-current liabilities	8,451	7,723
<b>Total liabilities</b>	<b>561,778</b>	<b>584,766</b>
<b>Equity</b>		
Equity attributable to owners of the parent	399,619	448,502
Common stock	81,577	81,577
Capital surplus	82,553	81,991
Retained earnings	228,026	279,201
Accumulated other comprehensive income	10,518	8,802
Treasury stock, at cost	△ 3,055	△ 3,069
Non-controlling interests	50,811	56,528
<b>Total equity</b>	<b>450,430</b>	<b>505,030</b>
<b>Total liabilities and equity</b>	<b>1,012,208</b>	<b>1,089,796</b>

\* During the fiscal year ended March 31, 2018, the company finalized the provisional accounting treatment for business combinations. Revision of the initial allocated amounts of acquisition cost is reflected in the March 2017 results.



## Consolidated Statements of Income

(unit: millions of yen)

Item	Previous fiscal year (reference) From April 1, 2016 to March 31, 2017	Current fiscal year From April 1, 2017 to March 31, 2018
Revenue	753,947	959,153
Cost of sales	△ 583,021	△ 695,316
Gross profit	170,926	263,837
Selling, general and administrative expenses	△ 142,661	△ 170,255
Adjusted operating income	28,265	93,582
Other income	4,768	6,658
Other expenses	△ 9,411	△ 4,503
Operating income	23,622	95,737
Financial income	4,008	2,910
Financial expenses	△ 3,460	△ 7,390
Share of profits (losses) of investments accounted for using the equity method	△ 311	4,355
Income before income taxes	23,859	95,612
Income taxes	△ 9,669	△ 26,390
Net income	14,190	69,222
<b>Net income attributable to</b>		
Owners of the parent	8,022	60,004
Non-controlling interests	6,168	9,218
Total net income	14,190	69,222
Net income attributable to owners of the Parent per share (basic) (yen)	37.72	282.16
Net income attributable to owners of the Parent per share (diluted) (yen)	37.72	282.16

## Consolidated Statements of Comprehensive Income

(unit: millions of yen)

Item	Previous fiscal year (reference) From April 1, 2016 to March 31, 2017	Current fiscal year From April 1, 2017 to March 31, 2018
Net income	14,190	69,222
Other comprehensive income		
<b>Items that cannot be reclassified into net income</b>		
Net gains and losses from financial assets measured at fair value through OCI	2,916	1,444
Remeasurements of defined benefit obligations	3,142	△ 378
Other comprehensive income of equity method associates	1	7
<b>Items that can be reclassified into net income</b>		
Foreign currency translation adjustments	△ 8,284	△ 2,425
Cash flow hedges	△ 88	160
Other comprehensive income of equity method associates	△ 206	△ 313
Other comprehensive income, net of taxes	△ 2,519	△ 1,505
Comprehensive income	11,671	67,717
Comprehensive income attributable to owners of the parent	7,876	58,437
Non-controlling interests	3,795	9,280

## Consolidated Statements of Changes in Equity

Current Fiscal Year (From April 1, 2017 to March 31, 2018)

(unit: millions of yen)

Item	Equity attributable to owners of the Company					
	Common stock	Capital surplus	Retained earnings	Accumulated other comprehensive income		
				Remeasurements of defined benefit obligations	Net gains and losses from financial assets measured at fair value through OCI	Cash flow hedges
Balance at beginning of year	81,577	82,553	228,026	△ 949	7,571	△ 14
Net income			60,004			
Other comprehensive income				△ 283	1,451	163
Comprehensive income for the year	—	—	60,004	△ 283	1,451	163
Acquisition of treasury stock						
Sale of treasury stock						
Dividends to stockholders of the Company			△ 9,357			
Changes in ownership interests in subsidiaries without a loss of control		△ 64				
Change in the scope of consolidation						
Transfer to retained earnings			30		△ 30	
Expiration of subscription rights		△ 498	498			
Transactions with owners	—	△ 562	△ 8,829	—	△ 30	—
Balance at end of year	81,577	81,991	279,201	△ 1,232	8,992	149

(unit: millions of yen)

Item	Equity attributable to owners of the Company					
	Accumulated other comprehensive income		Treasury stock, at cost	Total	Non-controlling interests	Total equity
	Foreign currency translation adjustments	Total				
Balance at beginning of year	3,910	10,518	△ 3,055	399,619	50,811	450,430
Net income		—		60,004	9,218	69,222
Other comprehensive income	△ 2,898	△ 1,567		△ 1,567	62	△ 1,505
Comprehensive income	△ 2,898	△ 1,567	—	58,437	9,280	67,717
Acquisition of treasury stock		—	△ 14	△ 14		△ 14
Sale of treasury stock		—		—		—
Increase/decrease by share exchange		—		△ 9,357	△ 3,999	△ 13,356
Changes in ownership interests in subsidiaries without a loss of control	△ 119	△ 119		△ 183	419	236
Change in the scope of consolidation		—		—	17	17
Transfer to retained earnings		△ 30		—		—
Other increase/decrease		—		—		—
Transactions with owners	△ 119	△ 149	△ 14	△ 9,554	△ 3,563	△ 13,117
Balance at end of year	893	8,802	△ 3,069	448,502	56,528	505,030

## Consolidated Statements of Cash Flow

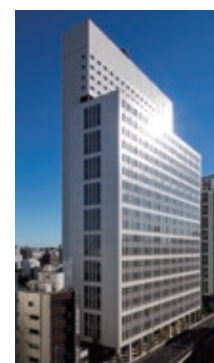
(unit: millions of yen)

Item	Previous fiscal year (reference) From April 1, 2016 to March 31, 2017	Current fiscal year From April 1, 2017 to March 31, 2018
Net income	14,190	69,222
Depreciation	30,680	32,306
Amortization of Intangible assets	3,284	5,526
Impairment losses	3,883	549
Gains on business restructuring	△ 933	—
Income tax expense	9,669	26,390
Share of profits of investments accounted for using the equity method	311	△ 4,355
Gain (loss) on sales of property, plant and equipment	△ 51	△ 574
Financial income	△ 4,008	△ 2,910
Financial expenses	3,460	7,390
(Increase) decrease in accounts and trade receivables	△ 1,482	△ 27,497
(Increase) decrease in lease receivables	△ 4,754	△ 14,257
(Increase) decrease in inventories	28,974	△ 24,664
Increase (decrease) in accounts and notes payables	20,580	53,337
Increase (decrease) in provisions and retirement benefit obligations	2,704	△ 248
Other	△ 3,152	△ 17,667
<b>Subtotal</b>	<b>103,355</b>	<b>102,548</b>
Interest received	2,573	2,548
Dividends received	593	1,179
Interest paid	△ 3,534	△ 5,089
Income tax paid	△ 15,026	△ 16,658
<b>Net cash provided by operating activities</b>	<b>87,961</b>	<b>84,528</b>
Capital expenditures	△ 13,999	△ 16,887
Proceeds from sale of property, plant and equipment	1,998	4,603
Acquisition of intangible assets	△ 3,304	△ 4,464
Acquisition of investments in securities and other financial assets (including investments in associates)	△ 56,070	△ 21,416
Sales of investments in securities and other financial assets (including investments in associates)	△ 3,807	469
(Increase) decrease in short-term loan receivables, net	63	116
Collection of long-term loan receivables	172	88
Other	337	△ 71
<b>Net cash provided by (used in) investing activities</b>	<b>△ 74,610</b>	<b>△ 37,562</b>
Increase (decrease) in short-term borrowings, net	24,232	△ 33,864
Proceeds from long-term borrowings and bonds	39,143	90,386
Payments on long-term borrowings and bonds	△ 69,883	△ 70,844
Payments on lease payables	△ 5,556	△ 4,700
Dividends paid to owners of the parent	△ 3,005	△ 9,361
Dividends paid to non-controlling interests	△ 7,862	△ 2,103
Purchase of shares of consolidated subsidiaries from non-controlling interests	△ 2,882	—
Other	△ 4	3
<b>Net cash provided by (used in) financing activities</b>	<b>△ 25,817</b>	<b>△ 30,483</b>
<b>Effect of exchange rate changes on cash and cash equivalents</b>	<b>△ 1,189</b>	<b>△ 9</b>
Net increase (decrease) in cash and cash equivalents	△ 13,655	16,474
Cash and cash equivalents at beginning of year	79,110	65,455
Cash and cash equivalents at end of year	65,455	81,929

## Company Information

### Company Profile (As of March 31, 2018)

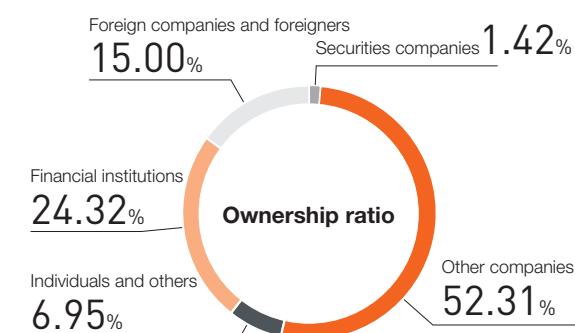
Company Name	Hitachi Construction Machinery Co., Ltd. (Hitachi Kenki Kabushiki Kaisha)
Paid in Capital	81,576 million yen
Head Office	16-1 Higashiueno 2-choume, Taito-ku, Tokyo, 110-0015, Japan
Establishment	October 1, 1970
President	Kotaro Hirano
Employees	23,925 (Consolidated) 4,072 (Non-consolidated)
Major Operations	Manufacturing, sales, rental and service of construction machinery, transportation machinery, environmental related products and other machines and devices
URL	<a href="https://www.hitachicm.com/global/">https://www.hitachicm.com/global/</a>



### Investor Information (As of March 31, 2018)

Stock Exchange of Listing	First Section of the Tokyo Stock Exchange (#6305)*
	*The cash equity market integration between Tokyo Stock Exchange (TSE) and Osaka Securities Exchange (OSE) was completed on July 16, 2013.
Accounting Auditor	Ernst & Young ShinNihon LLC
Stock Transfer Agent	Tokyo Securities Transfer Agent Co., Ltd.
Number of Shares Authorized	700,000,000
Number of Shares Issued	215,115,038
Number of Shareholders	25,069
Annual Meeting	The annual meeting of shareholders is usually held before the end of June in Tokyo.

#### Composition of Shareholders



#### Major Shareholders (Top 10 Largest Shareholders)

Shareholder	Number of shares held	Ownership ratio (%) (Third decimal place rounded off)
Hitachi, Ltd.	108,057,610	50.81
The Master Trust Bank of Japan, Ltd. (trust account)	22,855,800	10.75
Japan Trustee Services Bank, Ltd. (trust account)	10,690,800	5.03
Japan Trustee Services Bank, Ltd. (trust account 9)	4,750,900	2.23
Trust & Custody Services Bank, Ltd. (securities investment trust account)	2,908,400	1.37
STATE STREET BANK WEST CLIENT - TREATY (Standing proxy: Clearing and Settlement Department, Mizuho Bank, Ltd.)	1,967,774	0.93
Japan Trustee Services Bank, Ltd. (trust account 5)	1,786,500	0.84
Japan Trustee Services Bank, Ltd. (trust account 7)	1,723,300	0.81
JP Morgan Chase Bank 385151 (standing proxy: Settlement & Clearing Services Division, Mizuho Bank, Ltd.)	1,430,707	0.67
BNYM Goldman Sachs Japan (standing proxy: MUFG Bank)	1,329,200	0.63

\*1 Hitachi Construction Machinery holds 2,457,970 shares of treasury stock, but these have been excluded from the list of major shareholders above.

\*2 Ownership ratio is calculated without the 2,457,970 shares of treasury stock.



# **Hitachi Construction Machinery Co., Ltd.**

Hitachi Construction Machinery Co., Ltd.

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