

# CSR Key Initiative Themes

Part of the vision of the HCM Group's vision is to be active in the evolution of "machinery", and to make the synergy between "human" and "business" that creates rich living space more comfortable, highly developed and efficient. To achieve our vision, we offer a diverse line-up of products and services which are used around the world to build social infrastructures and develop resources. The raison d'être and social mission of the HCM Group are to continually contribute to the sustainable development of our customers and local communities.

## 8 Key Initiative Themes

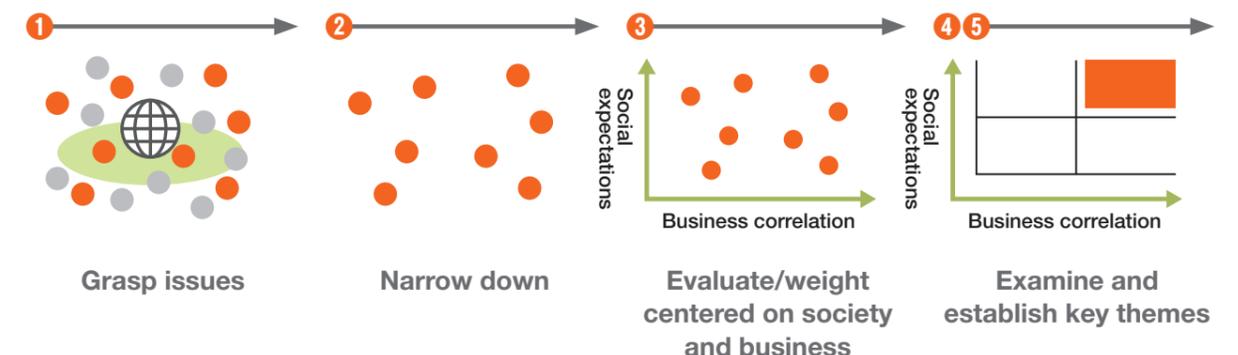
In FY2015, the HCM Group worked on analyzing the themes of the key CSR initiative themes along with various stakeholders both inside and outside of HCM and established themes for eight key initiative themes. We contribute to finding solutions for global social and environmental issues through our business operations in the frontlines of development sites in Japan and overseas.



### Process for Specifying Key Initiative Themes

The initiative themes were chosen using the following process.

- 1 We comprehensively grasped social and environmental issues related to HCM Group business strategies and current CSR initiatives.
- 2 We narrowed down issues to 40 items related to sustainability and corporate management.
- 3 We weighted the 40 items by evaluating them from a stakeholder perspective based on social expectations and their correlation to our business activities.
- 4 We examined the key themes of the initiatives by gaining an understanding of the opportunities and risks presented by each of these items.
- 5 We consequently came up with eight CSR key initiative themes.



# CSV Theme 1 Solutions to global environmental issues

Efforts to build an eco-friendly infrastructure are being increasingly undertaken around the world with the goal of achieving a low-carbon, recycling-oriented society that is highly adaptable to climate change.

Along with our stakeholders, we are pursuing the establishment of low-carbon, recycling oriented infrastructures around the world by using construction machinery and system that boast superior environmental technologies and by leveraging our developmental capabilities which focus on resolving environmental issues. We also aim to contribute to the development of infrastructure that is highly adaptable to disaster due to climate change by providing products, services and solutions.

### Initiatives we are focusing on

- 1 Reduce environmental impact for manufacturing processes
- 2 Develop and deliver Eco-Products, low-carbon emission construction equipment, dismantling, and recycled machinery
- 3 Applications for disaster recovery and disaster prevention
- 4 Environmentally conscious mining operation solutions
- 5 Green infrastructure solutions

### Social value

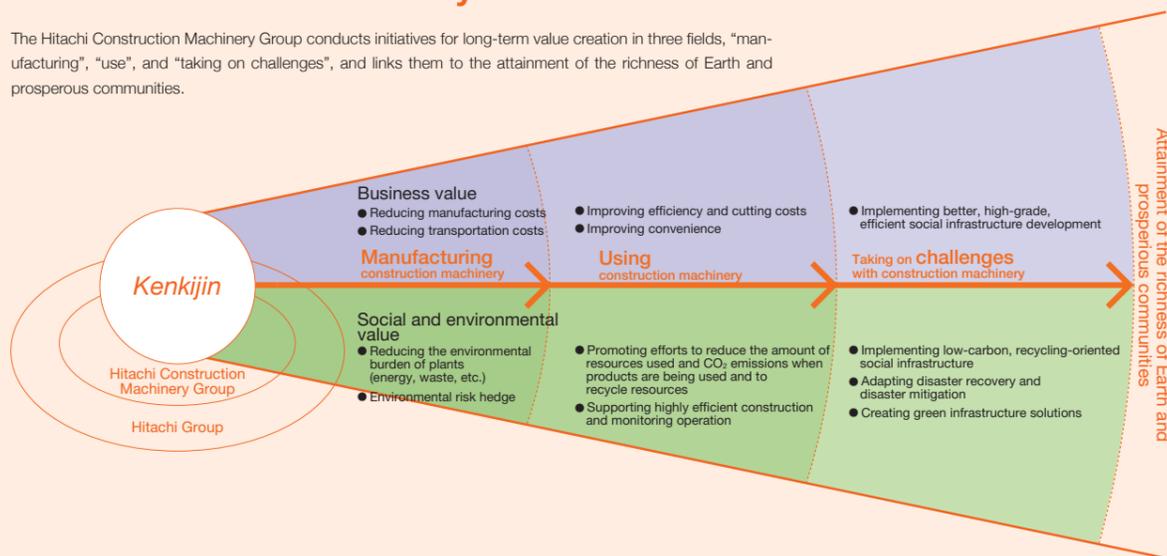
- Reduce environmental burden due to business activities
- Achieve infrastructure that can cope with the risk of natural disasters

### Business value

- Reduce cost incurred from business activities
- Achieve infrastructure development that is more gratifying, sophisticated, and efficient

## Environmental CSV Policy

The Hitachi Construction Machinery Group conducts initiatives for long-term value creation in three fields, "manufacturing", "use", and "taking on challenges", and links them to the attainment of the richness of Earth and prosperous communities.



### Environmental contributions through hybrid construction machinery

Hitachi Construction Machinery released the "ZH200-A" hybrid hydraulic excavator in 2011, and the "ZH200-5B" in 2013. With the 5B we worked towards a 30% reduction in fuel consumption compared with the ZX3 model. In April 2016, we released the "ZW220HYB-5B", the industry's first hybrid wheel loader, which has achieved a 20% reduction in fuel consumption compared with the standard machinery (ZW220-5B). This means that customers can now opt for low-carbon types of construction machinery in most projects. This naturally leads to cost reductions for the customer themselves during the product usage stage.

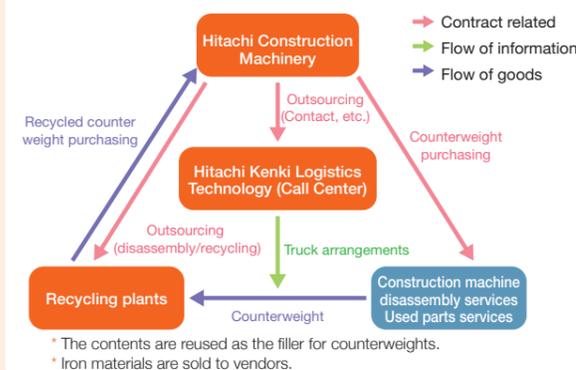


Hybrid wheel loader ZW220HYB-5B

### Counterweight recycling activities

Counterweights are weights used for balance during the operation of construction machinery. HCM has built the construction machinery industry's first counterweight recycling business program and has been operating it since 2006. Since it is now possible to recycle the counterweights that form roughly 10% of our products our possible recycling rate has increased from 86% to over 97% and to reuse almost all of our hydraulic excavators. These activities contribute to the promotion of resource recycling as part of our service parts remanufacturing activities.

In appreciation of these efforts we were awarded the President's Award at the "FY2015 Reduce Reuse Recycle Promotion Distinguished Services Awards" held by the Reduce Reuse Recycle Promotion Council in October 2015.



### Forestry machinery that contributes to reforestation

Due to their role of absorbing CO<sub>2</sub> in the atmosphere and reducing damage caused by avalanches and torrential rain, forests are an important part of our green infrastructure. Initiatives that make use of forests have begun to be implemented in urban planning and flood control in the U.S. and Europe. In order to protect and grow these forests it is important to conduct forestry operations such as periodic thinning and maintenance.

HCM increases our customers' safety and productivity and contributes to the formation of green infrastructure through business by offering a full line-up of highly specialized forestry machinery that is needed at forestry work and providing highly efficient solutions. In addition, we also make use of the emissions credits created by the Clean Development Mechanism (CDM) related to forest realignment to promote carbon offset initiatives for forestry machinery and fuel efficient construction machinery.



Forestry specific equipment making use of large-scale undercarriages specialized for forestry

# CSV Theme 2 Enhance initiatives to increase social infrastructure workforce

Demand, mainly for social infrastructures that supports sustainable lifestyles and mining development, is expanding worldwide. The lack of engineers, including site operators and construction engineers, to support the social infrastructure, is a major issue in Japan as well as at sites worldwide that support sustainable development.

We are actively undertaking various issues to tackle the lack of site engineers. This approach includes improving on-site work environments, as well as safety and productivity, and human resource development and passing on technologies. We aim to provide total solutions by leveraging the HCM Group's comprehensive technological capabilities by accurately grasping the diverse needs of various job sites. We plan to contribute solutions for the lack of engineers that support social infrastructures by providing substitute labor, strengthening manpower support, and assisting in technological training.

### Initiatives we are focusing on

- 1 Provide solutions to optimize mining processes and management
- 2 Achieve stable machinery operations and the reduction of life-cycle costs
- 3 Promote machinery and systems that improve the efficiency of construction procedures
- 4 Develop and delivery labor-saving machinery that is un-manned/uses robotics

### Social value

- Provide substitute labor and labor assistance at sites around the world that lack manpower
- Create employment opportunities for potential new labor

### Business value

- Develop new market by providing products and services that contribute to an improvement to customer's productivity and safety
- Stable businesses by securing sustainable sites for customers

### Reducing lifecycle costs and improving machine availability through Next-generation Service Solution "ConSite"

Hitachi provides cutting-edge technology to deliver a consistent level of high-quality service to the customers worldwide through ConSite. ConSite is a consolidated solution service to sustain the running of the customers business operation developed by the original researches based on the deep service knowledge accumulated in Hitachi.

ConSite have two advance reporting system to visualize the operation status of the customers machine. The customers can automatically receive a monthly report and alarm notification report transmitted via email in a timely manner into various devices e.g PC, smartphones and tablets. ConSite can identify the alarms that require urgent attention. To prevent catastrophic failures and downtime, an emergency alarm report swiftly sent to the customers and the official dealer to immediately verify the situation and take necessary action.

The operational data highlights daily working hours and fuel consumption in a colour-coded calendar format. This gives you an insight into how productive and efficient your machine has performed. The monthly report includes technical information and detailed analysis of the operational data, ratios, pressure and the temperature trends. These information allows customers to get a detailed picture of the "health condition" of their machines that contributes to reducing life-cycle costs through getting maintenance done at appropriate timing.

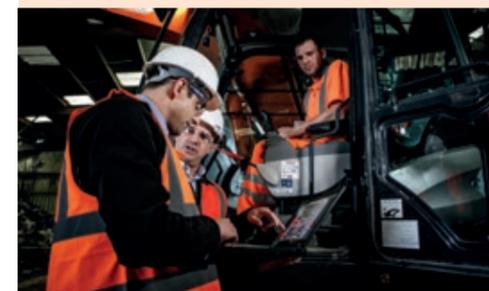
ConSite's data reports are available in more than 30 languages from around the world, and deliver regular summaries of operational data from over 35,000 machines via email. Available in more than 30 languages, ConSite's provides automated data report service to over 35,000 machines around the world. Hitachi will continuously provide additional services through ConSite.

### Example of ConSite application

#### The TJ Group of Companies, Hampshire (waste disposal and recycling)

The TJ Group of Companies has their head office in Hampshire, England, and they were quick to implement the ConSite system in order to optimize the operation of their mid-size hydraulic excavators. They use it to adjust refueling times, conduct maintenance on the machinery, and predict repair costs, all of which leads to cost reductions. According to the ConSite reports, the standby time for their "ZX130LCN-5" has been reduced by 20%, improving their swing rate by 70%.

According to Managing Director John Gosling, "ConSite is effective in reducing running costs for the life-cycle, and is one of the reasons we purchase Hitachi's machines. It's easy to tell the condition of the machine, and it also improves employee awareness of reductions in fuel consumption and effective operation of the machinery. Having real-time information at your fingertips about whether suitable machinery is deployed at work sites or when they need to be replaced for the next scheduled maintenance has made it possible for us to make appropriate decisions when budgeting as well".



Making use of ConSite's data for operator training

### The dump truck Autonomous Haulage System (AHS) that increases productivity and safety

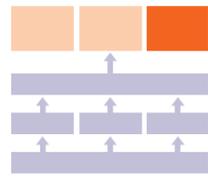
In order to safely and efficiently operate the giant dump trucks in use at mining sites you need human resources with high levels of driving skill and experience. However, for various reasons that include site conditions it has become more and more difficult to secure a labor force in recent years. In order to resolve this lack of skilled labor we are currently in the process of developing the AHS, an autonomous driving system that makes it possible to run unmanned dump trucks.

In addition to HCM's high quality vehicular control technologies, the AHS makes use of the railroad operation management systems and car navigation technologies that the Hitachi Group has spent many years refining, which will soon make it possible to make large contributions to the improvements in cost effective mining operation, labor saving, and safety.



Currently expanding verification testing for full practical usage





## CSV Theme 3 Contribution to community development

We, cooperating with various stakeholders, created the best solutions by accurately grasping the new needs of a region.

In our aim to realize a sustainable society, we support the development of various communities together with our stakeholders by maximizing the strengths we fostered through our business activities. We are making optimal use of the Hitachi Group's capabilities to provide a wide range of solutions in this particular field.

Expectations for corporate contribution to community development are also rising as evidenced by the United Nation's sustainable development goals (SDGs). We plan to continue to take on challenges to achieve sustainable development globally by further strengthening collaborations with external stakeholders.

### Initiatives we are focusing on

- 1 Development of machinery and human resources that meet regional requirements
- 2 Support for the development of overall community infrastructure utilizing Hitachi Group integrated capability
- 3 Provision of financing and machinery to support infrastructure development

### Social value

- Pursuit of global sustainable development including emerging countries and developing countries Business value

### Business value

- Development of new market, and differentiation of products and solutions

### Contribution to regional sustainable development through expansion of our remanufacturing business

One of the in-progress business strategies of HCM is the "remanufacturing business" which involves recycling used parts into parts that have the same functions as new ones. The business is to offer the recycled-parts that are functionally equivalent to new ones with warranty and at a reasonable price, after collecting the parts replaced for repair at the remanufacturing plant. The biggest merit of this business is that it developed in response to the needs of our customers on location, rather than being driven by the manufacturers' production divisions. HCM started this

remanufacturing business in 1970, and as of the end of March 2015 it has now expanded to 14 locations worldwide.

Hitachi Construction Machinery Zambia (HCMZ), parts remanufacturing plant established in spring 2012, now covers approximately 100 key components operating in Zambia and Mozambique. We are making a large contribution to the creation of local employment. Actually 135 employees out of total 150 are locally hired employees at the plant in Zambia. Additional 10 local engineers are to be hired in the end of June 2016 for the expansion of the plant.

#### ■ Remanufacturing sites around the world



The "remanufacturing center" in Tsuchiura, Ibaraki also plays the role of developing recycling technology and transmitting information to other Group remanufacturing locations

In addition to reducing life-cycle costs for customers, conserving energy and curtailing the use of raw materials, our service parts remanufacturing service also makes it possible to contribute to regional sustainable development through reduction of waste and creation of new employment. The HCM Group will continue to promote this remanufacturing business from this point forward as well.



Employees at the Zambia service parts remanufacturing plant

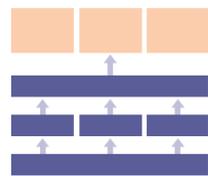
### Support for Cambodian independence through an NPO

Known as the "country with the world's highest density of underground land mines", Cambodia still suffers from injuries and deaths due to land mine accidents even now despite the end of their civil war. This is a major social issue that prevents social development. Since April 2007, the HCM Group has been supporting local people through donations to NPO Good Earth Japan (GEJ) in using land for their independent life after removal of land mines.

In terms of support activities, we started with the hardware side through equipping the country with infrastructure such as roads and arable land and now place our emphasis on continuous support activities on the softer side through instruction in road maintenance and repair skills and agricultural skills such as rice cultivation, poultry farming, and mushroom cultivation. We continue to work towards expanding the areas being supported with the goal of achieving a peaceful and flourishing society filled with the laughter of children.

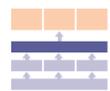


Mushroom cultivation training



## The five fundamental themes of our CSV initiatives

The HCM Group is focusing on value creation related to the CSV key initiative themes on the frontlines of various locations around the world to work towards resolving environmental and social issues through business. In addition, we have put priority on following five themes as essential initiatives in the implementation of the three CSV themes, and are undertaking further reinforcement of the business foundations.



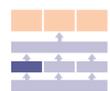
### Pursuit of safe, effective, and sophisticated products and working environments

Development of technologies for securing quality and safety, and differentiation

We aim to achieve higher productivity and safety of job sites using innovative solutions through ICT (information and communications technologies) and ALD (analysis lead design) that are created by collaboration both inside and outside of Hitachi Group.

Provision of accurate information on products/services

We provide accurate information about products and services in a timely manner such as preventive maintenance and after-sales service that prevents product malfunctions, in addition to information about product recalls and service campaigns.



### Safety of employees

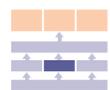
A fair work environment

In addition to complying with laws and regulations related to working hours applied in each region, we take into consideration a work-life balance and make efforts to curb overworking.

Global management for health and safety of employees

We have built a management system for safety and health of employees of our domestic and overseas Group companies, and are supporting their activity to obtain "OHSAS18001\*" certification.

\*1 OHSAS18001: an international standard for the establishment and operation of an occupational safety and health management system.



### Development of global and local human resources

Management localization

We will strengthen governance and delegation of authority to local human resources by offering educational opportunities such as "Succession Plan", an educational program for the development of global human resources.

Development and recruitment of local employees

In order to truly respond to our customers' on-site needs, we proactively hire local personnel and aim to cultivate the skills and technicians who can provide customers with the best possible solutions.

### Global personnel management leveraging diversity

We conduct personnel management in three stages to allow Kenkijin around the world to display their superior abilities. In "(1) Gather" we conduct disclosure of easily understandable information, in "(2) Learn" we conduct a wide range of training

programs that take into account position and level, and in "(3) Grow" we conduct the creation of systems that promote the cultivation of local personnel on location.



### Creation of better business transactions and value chains

Suppliers and human rights

We undertake the establishment of a sustainable supply chain by eliminating materials and parts supplied by armed insurgents who contribute to human-rights violation.

Fair procurement

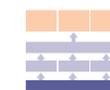
In order to share our perspective on CSR procurement with our partners, we conduct various activities such as the "Supply Chain CSR Survey" we have been implementing since FY2010.

Fair sales partnerships

We build appropriate relationships with distributors and partner companies, and we do not conduct unfair transactions such as deals based on unfairly different conditions or restrictions on the sales prices of supplied products.

Corruption prevention

We refrain from the unfair offering, promise, or provision of profits, as well as requests for money or gifts, and build healthy and appropriate relationships with governments, administrations, partners, and clients.



### Governance

Enhancement of global governance

We are working on enhancement of global governance through business localization and delegation of authority to Group companies, while sharing the values and procedures involved in business decision-making.

Management transparency

We aim for fair and highly transparent business practices, and strengthen corporate governance through the separation of the executive supervisory and business execution functions.

Fair tax strategies

We fulfill our tax responsibilities in all of the regions where we conduct business, and we comply with the spirit and tax laws applied in those countries and regions.

Risk management, including ESG

We enhance employee's risk management awareness and company-wide risk management systems in consideration of every possible risks on business management.