KOMATSU

CSR & Environmental Report 2012



Proudly Committed to Our Core Business The Very Essence of Komatsu's CSR

/// CSR Activities in Response to the Earthquake and Tsunami Disaster

Looking back at FY 2011, this was a year to focus on recovery after the unprecedented earthquake and tsunami disaster in the Tohoku area - a disaster that helped us discover what it is that corporations can do for society.

Komatsu regards its Corporate Social Responsibility (CSR) activities as an essential part of its core business. In our efforts to deal with this disaster, we have provided assistance by seeking to understand how we can fill the needs of the affected areas within the framework of our business, keeping in mind that people often need goods more than money.

The Komatsu Group has more than 670 employees in the three disaster stricken prefectures of lwate, Miyagi and Fukushima, and their work has always been closely linked to these local communities. I have personally visited these areas seven times to provide encouragement, and through these visits I have learned that every employee is listening to the stories of individual disaster victims and trying his/her utmost to offer support.

In addition to direct business-related activities, such as sales, rental, and service of construction machinery required for recovery and reconstruction, Komatsu has set up a dedicated department in Sendai City responsible for overseeing disaster recovery measures. Establishing this department has enabled us to respond promptly to the various needs of the region. By hearing the voices of the people of the community, we consider how best we can meet our corporate social responsibility by drawing on our management resources, and have executed various disaster recovery measures.

I hope that various companies will continue to support and collaborate through utilizing core businesses in order to help the recovery and reconstruction of the disaster area. (Komatsu's initiatives in the disaster area are described in more detail in our Special Story on page 39.)

/// Environmental Activities

Komatsu views its environmental activities as one of its toppriority management tasks and drives campaigns to reduce environmental impact in all phases of its business operations in order to meet the Mid-Range Management targets set two years ago.

To address climate change related concerns, Komatsu is working to reduce environmental impact throughout the product lifecycle, focusing on reducing CO₂ emissions from the use of products, such as hybrid hydraulic excavators and Automated Machine Control/Guidance System by utilizing ICT (Information and Communication Technology). Komatsu is also promoting its biodiesel fuel program, which is hailed as "carbon-neutral," for local production and consumption.

In its domestic production activities, when Komatsu was requested by the government to trim its peak power 15% amid concerns in the summer of 2011 over power shortages triggered by the nuclear power plant accident during the Tohoku earthquake, we realized a reduction of 30% or more. This summer, Komatsu has channeled its capital investment into private power generators and other facilities in a bid to cut the peak power by 25% from the summer of 2010. It also aims to drive the "Cut Power Consumption by Half" campaign in a three-year program to achieve both increases in domestic production and a reduction of CO₂ emissions.

Additionally, Komatsu continues its efforts to promote recycling of certain components, such as engines, and to reach "zero emissions," which Komatsu defines as a recycling rate as 99.5% or higher. We strive to drive reductions in the usage of environmental load substances, such as lead and mercury, and phase in the marketing of construction machinery compliant with the Japanese, U.S. and European emission regulations.

Further, Komatsu established the "Declaration of Biodiversity" two years ago to explore relationships between its operations and biodiversity and also a "one-site, one-theme activities" campaign.

To bolster sustainable growth, Komatsu is working to enhance the effectiveness of its environmental activities by partnering with overseas affiliates, rental dealers, suppliers, and distributors.

/// Shouldering Our Corporate Responsibility

Construction equipment for building towns and roads, mining equipment for extracting resources, and forestry machinery for production of timber and pulp - Komatsu products and services help build countries and create better living conditions worldwide.

In the process of developing Komatsu's business, people in many parts of the world receive training in service technology, accelerating the development of local human resources. Furthering business activities in this manner is directly linked to our CSR activities, and I always tell our people that I want them to do their work responsibly and with pride.

But there are, of course, rules that must be followed and responsibilities that must be met in this process.

Komatsu's Worldwide Code of Business Conduct lays down the rules to be observed by people around the world who work for Komatsu or are related to Komatsu's business. The Code



has been revised repeatedly and has recently been translated into local languages. The eighth edition of the code published in FY 2011, was issued not only in Japanese and English, but in fourteen other languages, so that employees worldwide will be able to understand it and conduct themselves accordingly. Through sharing these basic rules on a global scale, we strive to meet our social responsibility to observe the laws and regulations of each country or region and act in accordance with its culture and customs.

Recognizing our responsibility as a company with business evolving around the world, Komatsu is also a signatory to the UN Global Compact. We and our business partners will act through our supply chain in consideration of this voluntary code of conduct.

Komatsu's global network shares the basic management stance that "our corporate value is the total sum of trust given to us by society and all stakeholders," as we fulfill our responsibility to society through promoting CSR activities and pursuing sustainable growth.

in ny

Kunio Noii President and CEO

The Ten Principles of the Global Compact



[Human Rights]

- Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights;
- Principle 2: Businesses should make sure that they are not complicit in human rights abuses.

[Labour Standards]

- Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
- Principle 4: the elimination of all forms of forced and compulsory labour;
- Principle 5: the effective abolition of child labour;
- Principle 6: the elimination of discrimination in respect of employment and occupation.

[Environment]

- Principle 7: Businesses should support a precautionary approach to environmental challenges
- Principle 8: undertake initiatives to promote greater environmental responsibility;
- Principle 9: encourage the development and diffusion of environmentally friendly technologies.

[Anti-Corruption]

Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

*The United Nations Global Compact is a voluntary code of conduct in the four areas of human rights, labor, environment, and anti-corruption promoted by the United Nations for adoption by companies.

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Photo on the cover

Komatsu is active in the conservation of biodiversity. The cover picture is a Komatsu's forest and dump truck, 930E on display (The KOMATSU Way Comprehensive Learning Center). Left side, from the top: "Satoyama" (Field Testing Department), Biotope (Osaka Plant), 49 year-old cherry blossom tree (Oyama Plant). On the right: the unmanned dump truck 930E, which increases safety and reduces environmental load.

OUR APPROACH TO CSR

Komatsu defines its CSR activities as "responding to the demands of society through our core business." We have formulated CSR themes to be addressed on a global level, and are forging ahead with our CSR activities.

Furthermore, we will implement the CSR-management cycle, while making sure that these activities are aligned with the demands of the times and of society.

CSR Theme Formulation Process

Selecting CSR Priorities

In FY 2010. Komatsu formulated CSR themes with the help of BSR (Business for Social Responsibility), a USbased NPO.

The first step of the process was to select key CSR priorities that would allow us to contribute through our core business. CSR issues relevant to Komatsu's business were selected from a large number of social issues focusing on those that are important to both to our business and to our stakeholders.

Our CSR Priorities

Products, Services, and Customers Environment Products that enhance safety Environmentally-friendly products Responsible marketing and Environmental efficiency (facilities, customer care such as plants, and job sites) Remanufacturing Employees Human resource development Human Rights Safety and health Respecting human rights Respecting employees Equal employment **Ethics and Governance** Local Community Cooperation with stakeholders Development of local communities Corporate governance and Disaster relief compliance Improving local residents'

Compliance with social norms of business partners

quality of life

Komatsu's CSR Themes and Key Business Activities

After discussions internally and with BSR regarding CSR priorities, we defined three CSR themes that could be shared on a global level. Based on the current Mid-Range Management Plan, key CSR activities relating to the CSR themes were also identified.

Our CSR Themes and Key Business Activities

- 1.Enhancing Quality of Life Providing products required by society -
- · Providing products and services that contribute to infrastructure development and improve quality of life
- Improving productivity, safety, and efficiency and enhancing energy conservation through the use of Information and Communication Technology (ICT)
- Improving environmental efficiency at operation sites and facilities, such as plants
- Reducing our impact on the environment throughout the product life cycle • Enhancing safety for society, customers, employees, and business partners

2. Developing People

- Contributing to human resource development in local communities
- Enhancing our employees and suppliers through The KOMATSU Way
- Enhancing our employees and distributors through "Brand Management"

3. Growing with Society

- Engaging in dialogue with our stakeholders
- · Providing social contributions through the use of our core technologies and resources
- (e.g., disaster relief or activities to remove anti-personnel land mines)
- Contributing to local communities where we do business Strengthening our corporate governance and compliance
- Promoting compliance with environmental, labor, and social norms within our group and among business partners

	Organiz	ation	Committee	Area of CSR Oversight
Г	Executive Officer			
	Supervising CON	CSR Dept.	CSR Committee	Overall CSR · Social Contribution
			CSR Steering Committee	
and CEO		Environmental Affairs Dept.	Earth Environment Committee	Environment
		Compliance Dept.	Compliance Committee	Compliance
		- KOMATSU Way Global Institute	Komatsu Way Committee	Developing Human Resources
		Internal Audit Dept.		Internal Auditing
		General Affairs Dept.	Risk Management Committee	Risk Management
			- Information Security Committee	Information Security
		Legal Dept.		Compliance with Laws
		Export Control Dept.	Export Control Committee	Export Control
		Corporate Communications Dept.	Information Disclosure Committee	Information Disclosure
		Human Resources Dept.	Personnel Committee	Personnel System
		Quality Assurance Division	Corporate-level Product Safety Committee	Product Safety
		Safety & Health Admin Dept.	Group Health and Safety Committee	Health and Safety
		Procurement Div.		Procurement

Organization Related to CSR

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Incorporating CSR Into Management

Through dialogue with stakeholders both inside and outside the company, we will focus on our CSR themes and further develop these themes and key activities. In this way we hope to enhance the trust placed in us by society as we pursue sustainable growth.



Dialogue with Our Stakeholders

Komatsu has always placed great value in the Company's process for interacting and maintaining a dialogue with all of its stakeholders, including employees, business partners, investors, shareholders, and local communities. We also invite stakeholders from outside the company to voice their opinions on the Company's management and business.

In November 2011, Komatsu representatives invited the professors of four Japanese universities (Yokohama National University, Osaka University, Kanazawa University, and The University of Tokyo), with which Komatsu has concluded industry-academia collaboration agreements, to hold the first meeting of the Komatsu Industry-Academia Science and Technology Collaboration Council. Komatsu asked the academics to submit proposals from the perspective they gained through joint research with Komatsu, based on current social trends and Komatsu's technical domain.

Komatsu also held meetings on industry-academia

collaboration in China, with Shandong University and Tongji University, resulting in announcements and deliberations on internships, joint research, and other topics. The proposals and opinions solicited through this dialogue were both helpful and unique, and we will make efforts to see them reflected in our business and management methods.



Meeting of the Komatsu Industry-Academia Science and Technology Collaboration Council in November 2011

Komatsu's CSR Themes, Key Activities and Examples of Concrete Initiatives

Examples of Komatsu's CSR themes and key activities and concrete examples of initiatives are summarized below.

Activities, policies, etc. not included in the table below are introduced on the Komatsu CSR website. >> http://www.komatsu.com/CompanyInfo/csr/

CSR Themes and Key Business Activities	Examples of Concrete Initiatives	Page Reference in this Report		
1. Enhancing Quality of Life — Providing products required by society —				
Providing products and services that contribute to Autonomous Haulage System for mining equipment				
 infrastructure development and improve quality of life Improving productivity, safety, and efficiency and enhancing energy conservation through the use of ICT Improving environmental efficiency at operation sites and plants 	Introducing environmentally-friendly products and services to the market · Construction equipment compliant with the latest emission standards (Tier 4) · Hydraulically-driven forklifts consuming 30% less fuel than conventional models · Parts machining centers with CO ₂ emissions reduced by over 60% · Mobile crushers/recyclers/tub grinders	pages 21, 24		
	Proposing more fuel-efficient operation to customers · Holding energy-conservation workshops	page 22		
	Reducing the CO2 emissions and effective utilization of resources in business units • Upgrading to higher-efficiency production lines • Expanding the use of high-efficiency lighting • Air conditioning offices using groundwater • Zero emissions and conservation of water resources	pages 22, 24		
	Taking measures to maintain biodiversity at business units and facilities	pages 11-12		
 Reducing environmental impact throughout the product life cycle 	Reducing CO ₂ emissions in logistics · Improving load efficiency and utilizing nearby ports for transport	pages 16, 22		
	Promoting the "Reman" business · Remanufacturing used components such as engines, and placing them back on the market	page 23		
	Raising the recyclabilitiy of construction equipment	page 24		
 Enhancing safety for customers, society, employees, and business partners 	Incleasing the safety of products, services, and workplaces Holding training sessions for customers Pursuing initiatives that deal with occupational health and safety at the workplace 	page 28		
2. Developing People				
 Contributing to human resource development in local communities 	Developing human resources related to acquiring skills for servicing construction equipment • Organizing training centers in collaboration with distributors • Supporting human resources development in Senegal • Developing human resources through affiliations with universities and other non-Governmental facilities	pages 31-32		
 Enhancing our employees and suppliers through The KOMATSU Way 	Revision of The KOMATSU Way and human-resource development	page 34		
 Enhancing our employees and distributors through "Brand Management" 	Brand Management initiatives	pages 9-10		
3. Growing with Society				
 Engaging in dialogues with our stakeholders 	Communicating with stakeholders · Reinforcing dialogue with stakeholders · Reinforcing dialogue with employees · Engaging in dialogue with universities under industry-academia collaboration agreements · Communicating with business partners in the supply chain	pages 35-36 pages 29-30 page 4 page 41		
 Providing social contributions through the use of our core technologies and resources 	Disaster relief reconstruction after the Tohoku earthquake and tsunami	pages 39-40		
(e.g., disaster reliet or activities to remove antipersonnel land mines)	Removing anti-personnel landmines	page 42		
 Contributing to local communities where we do business 	Global social contribution programs tailored to the needs of each region · Supporting human resources development in Senegal · Offering a social rehabilitation program for young Chileans	pages 31-32 pages 37-38		
 Strengthening corporate governance and compliance 	Ensuring compliance by top management and all employees	pages 1-2		
 Promoting compliance with environmental, labor, and social norms within our group and among business partners 	Initiatives that address CSR Procurement Establishing CSR procurement guidelines and bringing awareness to business partners Pursuing environmental initiatives jointly with business partners 	pages 20, 22, and 41		

Editorial Policy

This report presents the most important aspects of CSR in an easy-to-understand manner, based on the CSR themes. The editorial policy is as follows.

Report based on CSR Themes

- The report details the contents of the three CSR themes through interviews with the executive officers in charge.
- In selecting a "Special Story" for each theme, we tried to include aspects that are currently perceived by society and by Komatsu as being important.
- In each theme, we presented the main initiatives or a representative activity

Printed Report and Web Posting

- The printed report presents information that should be reported to all stakeholders because it is highly important, new, or has been revised.
- We also issue a shorter booklet, called the Komatsu CSR Digest, which is created based on the content of this report.
- This booklet and CSR Digest can be viewed in PDF format on our website. In addition, the website provides (1) general information, such as policies and general rules, (2) information on ongoing activities and initiatives, and (3) a comprehensive disclosure of detailed information.

Website

http://www.komatsu.com/CompanyInfo/csr/2012/

Guidelines Used As Reference

- "Environmental Report Guidelines 2012" (Ministry of the Environment of Japan)
- "The Sustainability Reporting Guidelines G 3.1" (Global Reporting Initiative [GRI])

Period Covered

This report principlally covers data for the period from April 2011 to the end of March 2012, with some information from after April 2012.

Subsequent Reporting Schedule

Japanese and English versions: expected July 2013 Additionally, from the next issue forward, we plan to publish only the online version of Komatsu's CSR & Environmental Report. By utilizing characteristic features of the web, we aim to make the disclosed information easier to understand.

Company Profile

Company Name	Komatsu Ltd.
Established	May 13, 1921
Head Office	2-3-6, Akasaka, Minato-ku, Tokyo 107-8414, Japan
Representative	President and Chief Executive Officer Kunio Noji
Common Stock Consolidated	¥67,870 million (US\$828 million) as of March 31, 2012
Net sales (for the fiscal year** ended March 31, 2012)	Consolidated ¥1,981,763 million (US\$24,168 million*) Non-consolidated ¥851,139 million (US\$10,380 million*) *The translation of Japanese yen amounts into US dollar amounts is included solely for convenience and has been made for the fiscal year ended March 31, 2012 at the rate of ¥82 to US\$1, the approximate rate of exchange on March 31, 2012. *Komatsu's fiscal year ends on March 31. "FY2011," for example, means from April 1, 2011 to March 31, 2012.
Main lines of business (Komatsu Group)	Manufacture and sale of construction and mining equipment, utility equipment (small construction equipment), forestry equipment, industrial machinery, etc.
Komatsu Group profile	Number of affiliated companies 179

Changes in Consolidated Sales



Sales by Operation (FY2011)



(as of March 31, 2012)

Number of employees:

(*** **********************************	
Consolidated	44,206
Non-consolidated	9,541
Consolidated subsidiaries in Japan	9,257
Consolidated subsidiaries outside Japan	25,408

 Number of employees by region: (as of March 31, 2012)

Japan	18,798
The Americas	9,970
Europe and CIS	3,370
China	4,750
Asia (excluding Japan and China) and Oceania	6,125
The Middle East and Africa	1,193

Sales by Region (FY2011)



CSR 1 Enhancing Quality of Life — Providing products required by society —

Key Activities

- Providing products and services that contribute to infrastructure development and improve quality of life
- Improving productivity, safety, and efficiency and enhancing energy conservation through the use of ICT
- Improving environmental efficiency at operation sites and plants
- Reducing environmental impact throughout the product life cycle
- Enhancing safety for customers, society, employees, and business partners





Contributing to Sustainable Development while Enhancing the Lives of People

Yoshisada Takahashi

Senior Executive Officer President, Production Division, Supervising Environment Komatsu Ltd.

Komatsu uses the broad expression "enhancing quality of life" to describe the key theme behind its CSR activities. How do you interpret these words?

Takahashi: There are many types of business. Komatsu's businesses is built on products that improve the social infrastructure, and also products used in fields such as naturalresource mining and the forestry industry. So these words refer in a literal sense to enhancing the lives of people. Each of these key activities reflects Komatsu's core business, and I feel that this is consistent with our basic stance of conducting our CSR activities through our core business.

But, I think there may be some people who worry about the environment being harmed by our activities, or about the environmental impact of our production activities and products.

First of all, to reassure people in the local communities where we operate, we must strive to take thorough measures to ensure safety and protection of the environment, and explain these measures to the public. We should also make the greatest efforts to ensure that products shipped from these locations are designed to reduce their environmental impact.

Trends at international conferences dealing with the global environment show many scenarios for what each party should be doing. Komatsu, too, is taking a variety of initiatives. Can you please describe Komatsu's principal policy and strategic direction in this regard?

Takahashi: We have been keeping a close eye on global trends, based on the handling of the Kyoto Protocol and the deliberations at the United Nations Framework Convention on Climate Change (UNFCCC/COP). Komatsu will pursue its current policies and strive to bring them into line with the needs of society. At the top of the list is our basic, unchanging policy of contributing to sustainable development. In addition to reducing the environmental impact of our production activities, Komatsu is actively working towards sustainable development through recycling programs

Data

for components such as engines, and our biodiesel fuel project, among others.

One of the trends we have focused on in recent years relates to measures for mitigating climate change. One of the key areas in which Komatsu has been active not only concentrates on production, as in the past, but also focuses on research and development (R&D) to develop products with lower greenhouse gas emissions, such as CO₂, over the product's entire lifecycle. According to our calculations, when a product such as a hydraulic excavator is manufactured and utilized at a job site, 90% of the CO2 emissions over the course of its lifecycle will be generated while it is in operation at the worksite. This shows us that viewing these matters by only examining the activities we are directly involved in, such as production, may not be the most effective initiative to reduce CO₂ emissions. What is important is to think about what additional measures we can take to reduce the environmental footprint of our products. Take, for example, the hybrid hydraulic excavator introduced to the market in 2008. By the end of March 2012, approximately 1,500 units were in use worldwide. Considering that their CO₂ emissions during operation can be reduced by 25%, this can have a very significant impact.

The second new perspective is dealing with biodiversity. At the 10th meeting of the Conference of the Parties to the Convention on Biological Diversity (COP 10) held in Nagoya in 2010, an alarm was sounded regarding the continuing pace of species extinction, with no letup in sight. Komatsu, rather than responding through our supply of products and services, sees this as a problem to be addressed through the corporate social responsibility policies of our businesses in each locality. Our ongoing measures to bring production activities into line with environmental conservation naturally contribute to maintaining biodiversity. Additionally, we have also embarked on our own "one-site, one-theme activities". For example, the testing site in Usuki City, Oita Prefecture, is located on a vast site surrounded by rich forest. Since 2010, it has been the site of a pilot project that has improved the environment by successfully securing a habitat for rare animals through the creation of a satoyama (nature area) rural landscape and a biotope that combines waterfront and forest. Similar initiatives are in progress at business units within Japan and abroad.

Through these various initiatives, Komatsu aims to fulfill its corporate social responsibility and, at the same time, strive to become a company trusted by all Komatsu stakeholders.



The new Osaka Technical Center completed in May 2011, with a satoyama (nature area) and a biotope in the foreground

Faced with power shortages following the nuclear power plant accident in March 2011, the reduction of power consumption has become a pressing issue in Japan. In addition, it is being viewed as a means to reduce emissions in the interest of environmental protection.

Takahashi: Komatsu is currently implementing measures with the goal of halving our peak power usage (the maximum power consumption within a specific period; usually expressed as a one-hour average) until FY2014. At the same time, a number of our plants are also working to reduce their overall power consumption by one-half. While maintaining production capacity is a necessity, we are making efforts to close less energy-efficient buildings or integrate them with other facilities, and reduce gross floor area. In addition to using in-house power generators, we plan to reduce power consumption through a variety of measures, such as the replacement of production equipment with more energy-efficient models, and the use of groundwater for office air-conditioning systems.

Additionally, we are preparing for protracted energy-supply instability by establishing a sustainable production system that will be better able to operate under such conditions.

What are you doing to improve safety?

Takahashi: Komatsu is a company that prides itself on putting "safety" first. Fuel economy and environmental performance are often the most appealing aspects of the products we supply to our customers, but we are always pursuing "Dantotsu (unique and unrivalled)" features in safety. Adopting ICT is an important factor in distinguishing the safety performance of our products from those of other manufacturers, and that is why we have made it one of the pillars of our basic R&D policy.

As our business evolves around the globe, we are specifically addressing the advancement of our worldwide safety activities to the level where they are "Dantotsu," while also targeting safety in production and at the work site.

Some Komatsu plants around the world do not have a very long history, but it is nevertheless important that our plants make safety a priority. Hence Komatsu has set up a system under which so-called "mother plants" with R&D capability provide guidance to "child plants" in other parts of the world that manufacture the same products. For example, the Osaka plant where I worked until March hosts approximately forty manufacturing engineers and site supervisors each year from child plants in China, India and other countries. The purpose is not only to pass on production skills, but also to provide thorough training in safety standards and initiatives.

Through global teamwork in our activities around the world, we would like Komatsu to be recognized as a company that maintains a high level of safety, while bringing peace-of-mind to local residents.



Brand Management Initiatives for Realizing Our Customers' Ideals



Become Invaluable to Our Customers, who Both Create and Assess Our Corporate Value

Komatsu embodies this concept in our statement that "our corporate value is the total sum of trust given to us by society and all stake holders." We have made raising the Company's corporate value the basic stance of management.

If we group our various stakeholders into those who create corporate value and those who evaluate corporate value, the former role would fall to employees, business partners, and sales and after-sales service agents, and the latter would include society, shareholders, investors, and the media. As we see it, only our customers take on both of these roles. Customers both create and assess our corporate value, and feed the result back to us in return.

"Heightening the trust placed in us from our customers" was then defined as "increasing the degree to which our company is indispensable to our customers and as a result continues to be selected as the partner of choice." Initiatives in this regard for brand management activities have been under way since 2007.



Currently, we are developing Brand Management activities targeting 90 client companies in 18 countries. Case studies are shared among Group companies worldwide and regular meetings are held to provide opportunities to learn from each other. This photo shows a meeting held in November 2011, which was attended by 48 representatives from 16 countries, with 39 representatives from Japan.

Realizing Our Customers' Vision and Mission, "from the Customer's Perspective"

Komatsu's basic policy regarding Brand Management activities is "from the customer's perspective." People often think that marketing activities are about ways to differentiate one's products from those of competitors, and about positioning oneself in the market. But this is not the case. Acting from the customer's perspective refers to the ideal, and the mission, of discovering what customers want and of responding to these needs.

To realize this, we are engaged in activities designed to develop and improve our own management resources and capabilities on an ongoing basis. In the past, these initiatives tended to rely on experience and intuition, but in the context of Komatsu's Brand Management activities, we are now using a variety of tools and methods to develop case studies and accumulate know-how to be passed on to the next generation.

In other words, Komatsu's Brand Management activities refer to The KOMATSU Way applied to marketing and customer relationships. The idea is not to simply raise sales and profits and increase market share in the short term, but to use these activities to interact with customers and heighten customer trust by visiting their workplace, while at the same time improving the level of our employees and the strength of our organization. Case study: Initiatives Pursued by Rio Tinto, a leading international resource developer

Rio Tinto's "Mine of the Future™"

Rio Tinto is a leading international resource developer and mining group and one of Komatsu's most valued customers; Komatsu supplies dump trucks and other mining machinery to the group.

To ensure the stable extraction and supply of limited resources, mining sites are moving farther away from inhabited areas and extracting materials at deeper levels, resulting in an ever more challenging working environment. That is where Rio Tinto arrived at the concept of "Mine of the Future™", an idealized model that harnesses state-of-the-art technology to enable employees thousands of kilometers away to run mining operations by remote control.

Rio Tinto's "Mine of the Future™"

For future access to resources, we are looking beyond our current licence to operate and thinking about better ways of mining.

With our "Mine of the Future™" programme we are demonstrating improvements to mining processes that include unprecedented levels in automation, and remote operations that will revolutionise the way mining has been conducted for more than 100 years.

"Mine of the Future™" will help us improve our sustainable development performance in several areas. The programme is designed to create next generation technologies for mining operations that result in greater efficiency, lower production costs, improved health, safety and environmental performance, and more attractive working conditions.

Excerpted from "Rio Tinto's web site."

Unmanned Dump Trucks Help Realize a Customer's Dream

As one means of realizing this objective, Komatsu has developed and introduced its Autonomous Haulage System (AHS), an unmanned dump truck operation system.

AHS consists of unmanned dump trucks, manned nontruck vehicles, and an operation management system that manages the entire mining operation. With this system, customers can manage their fleets with fewer drivers, thereby protecting employees from difficult working conditions and, at the same time, reducing operating costs. This also helps improve safety by significantly reducing accidents caused by driver error. AHS also optimizes driving performance, which improves productivity and reduces fuel and tire costs.

Komatsu realized this system by matching its in-house management resources, in the form of its extensive experience in unmanned haulage technology, with the working processes in the customer's mines. We continue to make improvements based on actual on-site work experience.



In November 2011, a memorandum was signed, providing for more than 150 unmanned dump trucks to be put into operation by 2015 at Rio Tinto's iron mines in the Pilbara region in the north of Western Australia. This photo shows the signing of the memorandum by Tom Albanese (right), CEO of Rio Tinto, and Kunio Noji (left), President of Komatsu.

Voice

Sharing Values and Transforming Dreams into Reality

s and Dreams into Mr. Noboru Yamaji President, Rio Tinto Japan

Our mottos at Rio Tinto are "becoming a leader in the mining industry" and "becoming the best company", but this does not mean the desire to simply achieve top sales and market share. With "best" we mean that first of all, our operations should be safe. We are also focused on the well-being of our employees and their families, building trust, providing stable quality, and ensuring stable supply.

As the world's population passes seven billion, the worldwide demand for resources will inevitably increase. This demand is moving the worksites of the extraction industry, of which we are part, ever farther away from ports and deeper into the earth. A common problem at these kinds of worksites that inevitably arises for companies in all regions is securing a capable workforce. I think the only way to solve this problem is through automation and remote control technology.

Komatsu has been our partner for 40 years. Even though our positions differ, we share the same values, solve issues that need improvement through discussion, and build a relationship of mutual trust. We would like to continue to move forward together with Komatsu, with whom we share a common destiny, to transform our mottos and dreams into reality.

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Komatsu will maintain our commitment to protecting biodiversity in our business activities, recognizing the impact of those activities on the ecosystem.



Initiatives that Deal with Biodiversity

With the establishment of Komatsu's "Declaration of Biodiversity" and "Biodiversity Guideline" in January 2011, business units worldwide began activities designed to preserve biodiversity.

Komatsu understands that our business activities depend on biodiversity and impact it at the same time, and promotes initiatives to preserve biodiversity on two levels.

First, the Company continues to promote ongoing efforts to reduce the environmental impact of Komatsu's business activities. Komatsu also considers biodiversity when deciding how land is to be used, such as when building factories.

Second, Komatsu is becoming directly involved in the preservation of biodiversity, and at the same time expanding our "one-site, one-theme activities" to raise employee's awareness of the need to preserve local ecosystems.

Declaration of Biodiversity by Komatsu (Excerpt/Summary) Komatsu recognizes that its business activities are dependent on and influence benefits from the ecosystem through its biodiversity. Based on this understanding, Komatsu strives to take actions in accordance with the following guidelines, as it shares a sense of responsibility regarding the biodiversity crisis, and strives to conserve diverse resources. (Policies described below)

- I. Komatsu recognizes that conservation and promulgation of biodiversity are important management tasks.
- I. Komatsu shall promote biodiversity through the following two perspectives.
 - Komatsu shall reduce its environmental impact, which is affecting biodiversity, through its business activities. (Reduction of environmental impact from products throughout their lifecycle)
 - 2.) Komatsu shall work for conservation and promulgation of biodiversity through its social contribution activities.
- II. Komatsu shall promote activities by means of a step-by-step approach.
- IV. Komatsu shall promote activities in collaboration with local communities.
- V. Komatsu shall involve its employees in these activities
- VI. Communication: Komatsu will strive to educate and disclose related information to employees.

Examples of Initiatives at KomatsuPlants Biotope Construction at the Osaka Plant

At the Osaka Plant, we constructed a natural woodlands area and the biotope when we established a new development center building. On this occasion, we made diligent efforts to preserve local species of flora, for example using soil from local fallow fields for the basins of ponds, and dispersing fallen leaves from

local forests in the woodlands area. Additionally, the plant made efficient use of resources by utilizing recycled waste water from the plant to fill the pond. During an inspection in October 2011, rare species of plants were discovered. From 2012,



Osaka Plant: Woodlands area opened to the public.

the woodlands area was expanded and some areas were opened to local citizens. Komatsu will continue with its conservation activiteis to serve as a part of the biological network in that region.

Biotope Construction of the Oyama Plant

At the Oyama Plant, 10,000 tons of flood-control space and green space were preserved in an 18,000 sq. meter area on the plant's premises. In the future, we plan to construct a biotope

and natural woodarea in this area. In some areas, work such as pruning and thinning the brush has already started. Colonies of herons and several rare plant species have been observed in this area. We plan to construct the area, to further promote conservation activities.



Oyama Plant: Consolidation of Flood-Control Landscape

Komatsu Reman Center Chile S.A. (KRCC): Hydroponic Farming in the Desert

KRCC is supporting technological development for the hydroponic farming of vegetables in extremely arid regions (ASGRALPA project). These activities are an effort to provide more economical fresh vegetables, which are difficult to obtain in the region, through the use of hydroponic farming around mining areas in Antofagasta, north of the Atacama Desert. By doing so, KRCC hopes to make the area more habitable, leading to the creation of new agricultural opportunities. KRCC is collaborating

with Chile's national government, local governments, and universities to finance, run, and expand the project. The current issue they face is acquiring water for farm irrigation, and Komatsu is working to resolve this issue by establishing cooperative relationships around the world.



Hydroponic Farming at KRCC

Komatsu Construction Equipment Sales and Service Japan Ltd. - Tohoku Company: Biotope Construction

At the Tohoku Company of Komatsu Construction Equipment Sales and Service Japan Ltd. (Sendai), the biotope was also constructed during the reconstruction of the offices and plants damaged by the Great East Japan Earthquake. Based on Biotope Restoration and Procreation Guideline in Sendai city, Komatsu is constructing a green space using typical native species of Sendai's ecosystem. Komatsu Construction Equipment Sales and Service

Japan Ltd. anticipate that this green space will help reconstruct the biotope network of Sendai.



Biotope of Tohoku Company

11 CSR & Environmental Report 2012

Data

Fauna and Flora Assessment at the Test Facility (Oita)

The test facility in Oita, where Komatsu tests construction equipment, is an environmentally diverse area surrounded by mountains. As a part of biodiversity-conservation activities at the test facility, Komatsu conducted an assessment of flora and fauna in FY2011. Because this was also to be a model for other sites. assessments were conducted during all four seasons. The results showed that the flora in the woodland areas of the test facility were similar to those outside the facility, and that regional flora were being sustained. Additionally, it was found that the ratio of foreign species to the indigenous flora being sustained in the area was low. Furthermore, several rare plant and animal species were discovered, and Komatsu has begun activities for their conservation.

One of these activities is the creation of a natural woodland area. By thinning out guercus trees and cutting down other vegetation, the woodland was cultivated as a bright and wellmaintained natural area. Because the wooded area is close to the office building, it is often used as a recreational area by employees. The area is also used for field trips by local elementary school students, allowing them to better appreciate nature and

Results of the Flora and Fauna Assessment Number of species verified within and around the test facility Plants 467 species (including rare species) 367 species (including insects and rare species) Animals





Site of the Flora and Fauna Assessment the benefits of a diverse ecosystem.

Consolidated Woodland Area

Participation in Local Activities

Komatsu City, Ishikawa Prefecture: Kibagata Lagoon Revival Project (Awazu Plant)

A local project based in Kibagata Lagoon, close to the Awazu Plant, has carried out activities to revive and restore the lush ecosystem of aquatic plants.

As a member of the community, the Awazu Plant supports these activities and helps maintain the natural biodiversity of the area.



Cutting reeds in Kibagata Lagoon



Kanazawa City, Ishikawa Prefecture: Awagasaki Yasuragi no Hayashi (Nature Reserve) Conservation Activities (Kanazawa Plant)

Through collaboration with the public administration and town council of Awagasaki, we are planting insect-resistant black-pine saplings in the Yasuragi No Hayashi (Nature Reserve) close to the Kanazawa Plant. Additionally, employees weed, prune, and clear ivv in the area three times a year.

The Kanazawa Plant continues work on environmental conservation in the area



Planting insect-resistant black-pine saplings and clearing ivy (171 participants, 2011)

Changing the Awareness of Employees

Komatsu has conducted employee-education activities related to biodiversity in all our major manufacturing facilities in Japan. To encourage employees to take action and develop greater awareness of biodiversity. Komatsu conducted educational activities for 889 employees in FY2011.

Certification of "Amount of Absorbed CO₂ for Kanazawa Forest Coproduction'

On December 5, 2011, the Komatsu Kanazawa Plant was recognized for its contribution to the

conservation of Awagasaki Yasuragi No Hayashi (Nature Reserve), and received certification by Kanazawa City authorities of an Amount of Absorbed CO₂ for Kanazawa Forest Coproduction of 16 tons.



Ouchi (GM, General Affairs) received the certification for the Amount of Absorbed CO2



Komatsu Environment Partnership. Kibagata Lagoon **Revival Project**

> Mr. Jun Tsuchida Representative



Our Kibagata Lagoon Revival Project was established through a collaborative effort among local government, private enterprise, and local residents. Its members conduct activities that help purify the water and conserve the ecosystem in the Kibagata area. In particular, Komatsu's Awazu Plant built wave-absorbing dykes in the spring as part of the orientation training for new employees, and has enlarged a pond planting Nymphoides (a type of aquatic plant). In the fall, many Komatsu employees and local citizens worked together to cut reeds in an effort to help purify the water. We hope to continue sharing knowledge and working together for conservation of the environment of Kibagata Lagoon.

Pursuing Environmental Management

Komatsu promotes environmentally-friendly activities throughout the entire Group to realize its vision of "What Komatsu Can Do and What It Must Do" for the environment and sustainable development.

Komatsu's Relationship with the Environment

In recognition of the fact that our business activities affect the environment on a regional and global level, we, at Komatsu, have placed the focus on the following four key areas:

- 1) Climate Change
- 2) Establishment of a Sound Material-Cycle Society
- 3) Conservation of Air, Water and Other Natural Resources as well as Management of Chemical Substances
- 4) Biodiversity

In line with the Komatsu Earth Environment Charter revised in 2010, the Komatsu Group embarks on global initiatives across business areas guided by the fundamental principles of

- (1) Contributions to Realization of Sustainable Society,
- (2) Simultaneous Realization of Environmental and Economic Performance, and
- (3) Observance of Corporate Social Responsibility.



Relationship of the Komatsu Group's Business Activities with the Environment

Komatsu Earth Environment Charter (June 2010 revision)

< Corporate Principles >

1. Contributions to Realization of Sustainable Society

Mankind must not only promote the further growth of a rich and comfortable society but also pass down this indispensable environment of our planet earth to future generations in a sound and healthy condition.

We, at the Komatsu Group, define environmental conservation efforts as one of the highest priority management tasks, and endeavor to contribute to the sustainable growth of society by integrating advanced technologies into environmental conservation efforts in all our business activities. This is represented by our hybrid construction equipment which features a substantial reduction of CO₂ emissions while in operation and by our superior manufacturing.

2. Simultaneous Realization of Environmental and Economic Performance

We are committed to improving both environmental performance and economic efficiency, as a group of companies working toward superior manufacturing for customer satisfaction. To this end, we constantly take up the challenge of advancing technologies to develop creative products that improve both environmental performance throughout the product's life cycle and the product's economic performance at the same time.

3. Observance of Corporate Social Responsibility

Each company of the Komatsu Group promotes environmental conservation by not only complying with the applicable laws and regulations of the concerned host community, region and country but also by establishing its voluntary standards which consider global and local environmental concerns. Each company of the Group also strives to fulfill its corporate social responsibility by actively participating in local environmental conservation programs and thereby promoting close-knit communication with local communities, while striving to become a company trusted by all Komatsu stakeholders.

< Guidelines for Corporate Activity >

1. Basic Stances on Earth Environmental Problems

We, at the Komatsu Group, work for sustainable society and earth environment through our global business operations by addressing the following four environmental problems with the stances discussed below

1) Climate Change

We will reduce the use of energy and emissions of greenhouse gas in all phases of our business activities ranging from research and development, production and logistics to sales and service as well as in the total life cycle of our products and services.

2) Establishment of a Sound Material-Cycle Society

Through our business processes, we work to minimize the use of natural resources, such as materials and water, promote their re-use or recycle them as much as possible, and expand Zero Emissions from our manufacturing activities around the world. At the same time we ensure the thorough management of waste materials in all our business domains, including our suppliers and distributors. We also continuously work to increase the recyclability rate of products at the time of disposal.

3) Conservation of Air, Water and Other Nature Resource as well as Management of Chemical Substances

We comply with not only local laws and regulations but also with our established standards concerning the conservation of water quality, prevention of air pollution, noise and vibrations.

As much as possible, we also ensure the thorough management of chemical substances for use in our business activities, while continuously reducing the use of potentially harmful chemical substances or replacing them with alternative substances for discontinuation of their use.

4) Biodiversity

We recognize biodiversity as one of the important issues concerning the earth environment, evaluate, understand and analyze impact on it in all our business domains, and work on our tasks according to the criteria of the highest impact and/or the most effective actions.

2. Framework of Global, Group-wide Environmental Management System

The Komatsu Head Office, as well as the manufacturing facilities and main companies of the Komatsu Group, already with ISO certifications, will work to maintain and improve their environmental management system, while other manufacturing facilities and suppliers will also work to establish their environmental management systems and reduce their environmental impact.

The Komatsu Environmental Committee develops environmental action plans and common guidelines for the Komatsu Group. Based on these Group-wide plans and guidelines, each division or company sets up its own mid- to long-term targets, develops and implements specific action plans, reviews them regularly and works to continuously improve them.

3. Environmental Education and Communication

We believe that it is important to enhance the environmental awareness of each and every employee and thereby actively promote environmental awareness and education programs for all employees.

We will gather environment-related information concerning not only our manufacturing facilities but also other related entities, such as major affiliated companies and suppliers, and strive to disclose such information, thereby facilitating proactive communication with all our stakeholders, such as customers, employees, local communities and suppliers and further expanding the content of environmental communication.

Environmental Action Plan and Results for FY2011

To promote the Komatsu Earth Environment Charter, the company formulates environmental action plans (implementation policies) for each field, establishes action targets for each fiscal year, and steadily advances its policies, while following up on their implementation status.

Environmental Management

Implementation policies	Objectives for FY2011	Results for FY2011	Medium- and long-term objectives	Additional information
1.Strengthen environmental management systems	Expand the certification acquirement to The KOMATSU Way Comprehensive Learning Center and Komatsu NTC Ltd. Fuchu Center Integrated certification of Komatsu House Ltd.	 Complete compliance confirmed during inspection for update and expansion. Integrated certification of Komatsu House postponed to next FY 	Acquisition of integrated certification by the Komatsu Group Manufacturing Facilities in Japan Certification acquired for overseas subsidiaries (Production)	P.19
2.Environmental education and training: Implement the education plan	Draw up and promote the education plan	 Held 15 courses with over 8,300 participants 	Continue to organize courses and expand them to overseas locations	P.48
3.Conduct environmental audits for overseas subsidiaries	Audit Chinese and Indonesian subsidiaries	Audit conducted for China (2 companies) and Indonesia (1 company)	Continuation of activity	P.20
4.Environmental communication: Publish a CSR & Environmental report	Formulate a communication plan and publish the report	 Published the Japanese version in July and the English version in July 2011 	Enhance the quality of the content; release report earlier than in previous years	

Research and Development

Implementation policies	Objectives for FY2011	Results for FY2011	Medium- and long-term objectives	Additional information
1.Reduce the environmental impact of construction equipment Develop low-emission construction equipment (compliant to emission standard)	Develop vehicles compliant with Tier4-Interim emission standards	 Developed a vehicle equipped with an engine compliant with Tier4-Interim emission standards (56~560kW) (PC200-10, D61-23, D155-7, WA500-7, HM400-3, etc.) 	Development of Tier4 final (STAGE IV) emission standard compliant vehicle in Japan, US, and EU by 2014	P.21
 Reduce CO₂ emissions from construction equipment (improve fuel efficiency of products) 	Vehicles compliant to theTier4-interim emission standard (hydraulic excavators: Δ 10% compared to existing models)	 Achieved 10% reduction with a hydraulic excavator compliant with Tier4-Interim emission standards (PC200-10 etc.) 	Decrease emissions by 10% from Tier4 Standard compliant vehicle (hydraulic excavator) by 2015. Decrease emissions by 35% from hybrid vehicles (hydralic excavators)	P.21
 Improve the recyclability rate of construction equipment 	Achieve 99.5±0.5% for equipment compliant with the next emission standards	 Adopted chlorine-free hydraulic hoses (changeover underway) (Established recycle route for disposing hydraulic hoses) Achieved 99% reduction with Tier4 compliant vehicles 	Achieve recyclability rate of 99.5±0.5% by FY2015	P.24
Strictly control and reduce substances of environmental concern in construction equipment	Maintain reduction of hazardous substances at 75% compared to 1998	 Maintained 75% reduction with newly developed vehicles Established goals for the reduction of lead use for 2015 	Reduce amount of lead use by 90% in comparison to the 1998 level by 2015	_
	Reduce the use of mercury and lead in vehicles compliant with Tier4 emission standards	Monitor panel of Tier4 compliant vehicles changed over to a mercury-free LCD panel Banned the use of lead for the balancer in torque converter impellers of the newly-designed machines	Ban the use of mercury in new designs by 2013. Ban the use of lead solder by 2015 (excluding PCBs)	_
	Reduce the use of SVHC of REACH	 Reduced usage of phthalate ester plasticizer [No DEHP used for decal (PVC base) / No use of DBP in the rubber for hydraulic hoses (preparation for banning the use of DEHP in progress)] 	End use of RCF (Refractory Ceramic Fibres) by 2014	P.26
	Utilize a separate hazardous substances control system for each product type (to comply with REACH regulations)	Conducted surveys of substances by product type in Japan and the EU for mass production The control system is being implemented outside Japan (with the exception of EU)	Manage substances of each component pursuant with new data	P.26
2.Reduce the environmental impact of industrial machinery • Market high-performance AC servo presses	Expand business affiliations for AC servo presses	Launched more compact AC servo presses	Expand AC servo press sales ratio	_
Market high-efficiency wire saws for solar cells	Develop machinery specialized for diamond wire	Diamond wire cutting purpose-built machine(PV500D) developed and released to the market	Expand business affiliations, increase application purposes	_
Market compact machining center	Develop compact machining center	 Machining Center (N30Hi) with a significant reduction in energy consumption (decreased by 70%) developed and released to the market. 	Expand business affiliations	P.21
3.Promote reuse and recycling Promote the "Reman" business	Expand and promote the "Reman" business	 Innovation of new recycling-related technology (implementa- tion of robotic thermal spraying technology) Enhanced production capability of Reman plants 	Promote reuse and recycling through further improvements in recycling-related technologies for parts	P.23

Manufacturing

Implementation policies	Objectives for FY2011	Results for FY2011	Medium- and long-term objectives	Additional information
1.Mitigation of climate change (energy conservation)				
 Make a 20% improvement by FY2010[average of the FY2008 to 2012] in the amount of CO2 emissions per unit of manufacturing value compared to the FY2000 level at the Kornatsu Group manufacturing facilities in Japan 	Improve 1% over the previous fiscal year	 Improved 28.3% from the FY2000 level; attained a 1.8% improvement over the previous fiscal year Curbed total CO₂ emissions by 18.1% compared to 1990 	Achieve a 40% reduction by FY2015 compared with the 1990 level Achieve a 43% reduction by FY2020 compared to the 1990 level	P.22
 Curb total CO₂ emissions to the FY1990 level (Komatsu Group manufacturing facilities in Japan) 				
2.Effective utilization of resources			By FY2015,	
 Maintain or make further progress in attaining 99.5% of greater recyclability rate by FY2015 (improvement towards zero emissions) (Komatsu Group manufacturing facilities) 	Attain a recycling rate of 99.1% or greater	 Attained a recycling rate of 99.7% across the Komatsu Group 	Japan: Attain a recycling rate of 99.5% or greater Overseas: Attain a recycling rate of 95% or greater	P.24
 Achieve a reduction of more than 20% by FY2015 in the amount of waste generated per unit of manufacturing value compared to the FY2005 level at the Komatsu Group manufacturing facilities in Japan 	Improve 1% over the previous fiscal year	 Achieved a 38.9% reduction in the amount of waste generated per unit of manufacturing value over the FY2005 level 	Achieve a 20% reduction by FY2015 compared to the 2005 level	P.24
Achieve a reduction of more than 25% by FY2015 in the amount of water used per unit of manufacturing value compared to FY2005 at the Komatsu Group manufacturing facilities in Japan	Improve 3% over the previous fiscal year	 Achieved a 39.1% reduction in the amount of water used per unit of manufacturing value over the FY2005 level 	Achieve a 25% reduction by FY2015 compared with the 2005 level	P.24

Implementation policies	Objectives for FY2011	Results for FY2011	Medium- and long-term objectives	Additional information
3.Environmental risk management Implement voluntary reductions in the release of chemical substances including VOCs, which constitute the majority of chemical substances released	Establish a control system for chemical substances and reduce the amount of released chemical substances	 Accomplished a 40,1% reduction in the amount of VOC released per unit of manufacturing value over the FY2005 level 	Achieve a 50% reduction compared with the FY2005 level	P.26
 Undertake soil and groundwater remediation at the Komatsu Group manufacturing facilities in Japan 	Continue the cleanup	In progress	Complete the cleanup work	P.25
 Sequentially address each underground tank that has been in operation for 20 years or more at the Komatsu Group manufacturing facilities in Japan 	No applicable underground tanks	No applicable underground tanks	Sequentially address each underground tank that has been in operation for 20 years or more	_
4.Other • Improve greenery rate by 20% or greater by FY2015 across the Komatsu Group. (Komatsu Group manufacturing facilities)	Greenery Rate 17.5% or greater	Komatsu Group acheived a total rate of 18.1%	Rate of 20% or greater by FY2015	

Procurement and Logistics

Implementation policies	Objectives for FY2011	Results for FY2011	Medium- and long-term objectives	Additional information
1.Green procurement Promote improvements at suppliers through the establishment of environmental manage- ment systems and by specifying matters that require environmental consideration	Provide guidance and support to member com- panies of the Komatsu 'Midori-kai' for acquiring integrated certification of their environmental management systems (EMSs)	 Certification acquired within FY2011: 2 out of 2 member companies acquired certification for a total of 155 certified companies 	Reinforce linkages with supplier EMSs	P.20
2.Environmental conservation in logistics				
 CO₂ emissions per unit of net sales generated through shipping of products and components (Komatsu manufacturing facilities in Japan) (in the scope of revised Law concerning the Rational Use of Energy of Japan) 	Improve by 22% over the FY2006 level	 Achieved 24.0% improvement compared to FY2006. Increase of CO₂ emissions by +22.6% compared to the previous fiscal year (Improvement of 5.8%, Increase of CO₂ by 28.4%)^{*1}. 	Improve CO ₂ emissions per unit of net sales generated through shipping of products and components by 31% by FY2015 compared with the 2006 level (Komatsu logistecs facilities in Japan)	P.22
 Shift to means of shipping with low environmental impact 	Promote modal shifts in shipping from trucks to inland ferries or rail	 The total modal shift rate for FY2011 was 22.5% (+6.2% compared to FY2006: +4.8% in railways and +1.4% in domestic vessels)*1. 	Continue to promote modal shift	P.22
 Promote reduction in shipping distances and improvements in shipping efficiency 	Increase the size of shipped units to large lots	Through such measures as increased use of vans at plants, increases in loading efficiency, and increases of automated vehicles by growth in manufacture at harbor plants, the improvement objective for 'load weight to 1 shipment' was improved by +3.1% compared to the previous year (increase in large lot shipments). Increased van usage ratio at CKD plants from 92.4% to 96.1% (+ 3.7%) and by enlarging stowage containers, implemented large lot shipments.	Continue to promote these efforts with the focus on CKD components	P.22
	Using nearby ports to shorten shipping distances (by trucks)	In FY2007, Komatsu constructed harbor plants for assembling large-size shipping machinery in Kanazawa and Ibaraki, then later began improving the utilization rate of the Kanazawa and Hitachinaka Port by the general consolidation of products from the Mooka and Komatsu Plants. As a result of using nearby ports, Komatsu was able to significantly decrease the distance per shipment. In FY2011, the average haul distance for truck trailers was shortened to 177.1km(19.2% reduction)	Continue improving to reduce the distance per shipment by utilizing nearby ports	P.22
From 2011 Implement environmental conservation activities in global logistics, both national and international	Prehension of CO ₂ emissions produced by shipments of 10 major overseas plants	 Implementation for monthly tracking of data for CO₂ produced by shipment in 10 major plants in the Americas (2 in US, 1 in Brazil), EU (1 in UK, 1 in Germany) China (3), and Asia (1 in Indonesia, 1 in Thailand). The total results for FY2011 will be reported. 	Formulate a global medium-term plan for FY2012. Globally expand logistic improvement activities that have been implemented in Japan and conduct global CO ₂ reduction activities	P.18 P.22

Sales and After-sales Servicess

Implementation policies	Objectives for FY2011	Results for FY2011	Medium- and long-term objectives	Additional information
1.Encourage Komatsu Group sales agencies and rental companies in Japan to reduce their environmental impact	Enhance awareness of the environment through education and training based on the Group's environmental guidelines	 Carried out activities for improvement through guidance provided during onsite visits to 156 sites Regularly issued the Safety and Environment Newsletter (24 editions published yearly) 	Support environmental conservation activi- ties by Komatsu Group sales agencies and rental companies in Japan based on the Group's environmental guidelines	P.20

Marketing Record for Hybrid Hydraulic Excavator



(as of March 31, 2012)

▶ CO₂ Emissions by Scope Scope1: CO2 emitted directly by manufacturing facilities (by using generators, boilers, etc.)



Scope2: CO₂ emitted indirectly by manufac-turing facilities (by purchasing electricity, steam and hot water)

*1: Effected by the increase of long distance shipment for the restoration of the Tohoku area, due to the Great East Japan Earthquake





Relationship between Business Activities and the Environment

The Komatsu Group procures various parts and materials and, through the manufacturing process, utilizes the earth's resources, including raw materials, water, energy, and chemical substances, among others, to provide products to customers. Such business activities impact the environment at each stage in the process.

The Komatsu Group will continue to provide high value-added products and services while assessing the environmental impacts resulting from its business activities, formulating medium- and long-term objectives, and introducing measures to reduce such impacts.







CO2 emissions: Calculated by multiplying the electric power, heavy oil, etc. consumed (see Energy section of Input column) by the CO2 emission coefficient (according to the Greenhouse Gas Emissions Calculation - Reporting Manual of the Ministry of the Environment based on the Act on Promotion of Global Warming Countermeasures)

SOx emissions : Calculated by multiplying the "S content by percentage" (based on element tables of suppliers) by the amounts of heavy oil, kerosene, light oil, and coke used.

NOx emissions : Calculated by multiplying the "nitrogen oxide emissions units" (obtained at each Komatsu facility) by the amounts of heavy oil, kerosene, light oil, natural gas, and LPG used.

Emissions and transfer of substances covered by the PRTR Law: Calculated by the "content ratio of specific chemical substances" contained in indirect materials multiplied by the "discharge or transfer rate." This calculation is based on the PRTR Law, which was designed to mandate the disclosure of the amount of specific chemical substances released into the environment to promote the management of such substances.



Scope of energy and CO₂ data of Logistics

- Komatsu (parent company) facilities, specifically the following fourteen plants The Awazu Plant, the Osaka Plant, the Rokko Plant, the Ibaraki Plant, the Tochigi Plant, the Kanazawa Plant, the Shonan Plant, the Oyama Plant, the Koriyama Plant, and Komatsu Logistics Corp (Parts Logistics Division)(The Kanto Parts Distribution Center, the Kansai Parts Distribution Center, the Awazu Parts Distribution Center, the Hokkaido Parts Distribution Center, the Kyusyu Parts Distribution Center).
- Komatsu Group manufacturing facilities in Japan, specifically the above fourteen plants and the following one business unit Komatsu Castex Ltd.
- Komatsu Group manufacturing facilities outside Japan, specifically the following ten plants Komatsu America Corp.,[Chattanooga Manufacturing Operation], [Peoria Manufacturing Operation], Komatsu do Brasil Ltda., Komatsu UK Ltd., Komatsu Mining Germany GmbH, Komatsu Shantui Construction Machinery Co., Ltd., Komatsu (Changzhou) Construction Machinery Corporation, Komatsu (Changzhou) Foundry Corp., Komatsu (Shandong) Construction Machinery Corp, PT Komatsu Indonesia Tbk, Bangkok Komatsu Co., Ltd..

Coverage of Data

- *1:8 Komatsu manufacturing facilities in Japan *2:12 Komatsu Group manufacturing facilities in
- Japan *3: Logistics of business sites in Japan Excluding data from the Awazu Distribution Conter the Helkkide Rate Distribution Cont
- Center, the Hokkaido Parts Distribution Center, and the Kyushu Parts Distribution Center *4: Sales agencies and rental companies in Japan
- *4 : Sales agencies and rental companies in Japan (Komatsu Construction Equipment Sales and Service Japan Ltd., Komatsu Rental Ltd. and Komatsu Forklift Japan Ltd.) were added

Enhancing Quality of Life

with Society

Organizational Chart of the Environmental Management Structure

Board of Directors				
The highest executive body to consider top-priority matters and make decisions on management policies of the Komatsu Group.			Person in charge of environmental managemen	t: 8
President and CEO		-	Research and development divisions	
	Corporate level control division (Environmental Affairs Department)	ьHi	Manufacturing divisions	
Strategy Review Committee		Ή	Sales and after-sales services divisions	
The executive body to study and review basic policies, plans, and strategies, hold		H	Business units	
deliberations involved in top-priority corpo- rate affairs, and present these to the Board		H	Affiliated companies	
of Directors. This committee consists of the standing executive directors.		- 4	Manufacturing facilities outside Japan	
	Research			
Earth Environment Committee	Environmental Committee		Environment Management Groups	
This committee has ultimate authority for approving Komatsu's environmental con- servation measures. Its meetings are held biannually. Its mission includes formulating	Development Development Meeting		Environment Technology Working Group	os
specific environmental action plans based on the Guidelines for Corporate Activity of the Komatsu Earth Environment Charter and determining Komatsu Group's overall direction in environmental conservation.	Manufacturing Manufacturing Technology Meeting	H.	Environment Management Personnel Liaison C	Council
environmental management, it consists of executive officers responsible for individual			Utility Sectional Committee	
divisions.	Logistics Planning Meeting	<u>; </u>	Logistics Manager Liaison Council	
	Manufacturing Facility Environment Management Committee		Environment Promotion Team	
	Procurement Division			
	Procurement Meeting		Procurement Control Manager Meeting	
Global Safety and Environmental Affairs Meeting	Sales and after-sales service			
Chaired by an executive officer in charge of	Komatsu Japanese Dealer Meeting		Liaison Council (After-sales service division in	Japan)
environmental management, this meeting is attended by officers responsible for		- 4	Liaison Council (Rental division in Japar	1)
in Komatsu manufacturing facilities both in and outside Japan. Meeting every two	Affiliated Companies' Environmental Management Conference	1		
years as a rule, it provides a platform to implement policies and measures formulated by the Earth Environment Com-	Environmental Management Conference for Manufacturing Facilities outside Japa	ı		

Acquiring ISO14001

Komatsu has implemented a Group-wide initiative to acquire ISO14001 certification, an international standard for environmental management systems. The objective is to enhance management quality by strengthening systematic steps towards environmental conservation.

Since 1997, several manufacturing facilities both inside Japan and abroad received certification. In FY2005, the four

plants belonging to Komatsu Ltd. (the parent company), the Awazu, Osaka, Mooka, and Oyama Plants, acquired integrated certification. As the second step, in FY2007 Komatsu added its major affiliates in Japan and yet-to-becertified non-manufacturing facilities — notably the Head Office — to the above four plants, with integrated certification attained by the Group in Japan in May 2008.

mittee and to exchange information related

Upon completing the March 2012



ISO14001 Integrated Certification

reassessment audit, the KOMATSU Way Comprehensive Learning Center and Komatsu NTC Ltd. were included in the integrated certification. The Group seeks to raise the level of management in Japan.

Additionally, an overseas affiliate, KUCC (Komatsu Undercarriage China Corp.), attained certification in December 2011 and STAVMEK (Stavmek s.r.o.: Czech Republic), attained certification in April, 2012. We will further promote the certification of overseas manufacturing facilities into the future.

Global Safety and Environmental Affairs Meeting

On November 10th to 11th, 2011, twenty-nine safety and environmental management representatives from thirteen countries participated in the Fifth Global Safety and Environment Conference held at The KOMATSU Way



Global Safety and Environment Conference (at The KOMATSU Way Comprehensive Learning Center)

Data

Comprehensive Learning Center. Japanese representatives from the Komatsu Awazu Plant, Kanazawa Plant, Komatsu Castex Ltd., and Komatsu NTC Ltd. participated.

This conference provided an opportunity for face-toface communication and, in addition to deepening the understanding of new policies, facilitating the sharing of information laterally across the organization.

Komatsu Group will continue to strive to provide additional global opportunities for communication.

Environmental Education and Training

In Komatsu Group's basic education system, the parent company and individual divisions share the responsibility for education. The parent company develops educational materials and provides educational services on relevant academic issues for use by Komatsu Group companies. Individual divisions, on the other hand, provide instruction on more hands-on matters, including unique features particular to the individual divisions. Education and training is tailored to different occupational content, and includes lectures on the environment.

In FY2011, environmental education was administered on the basis of essentially the same curriculum as in the preceding year. Education in the environmental code launched since 2010 was contined into FY2011. Activities designed to enhance awareness of the importance of biodiversity protection among employees were also implemented proactively.

Komatsu encourages employees to obtain an appropriate environment-related certificate that is recognized by public institutions.

Environmental Inspection at the Komatsu Subsidiary in Brazil

Komatsu has established environmental protection guidelines, which are based on the Komatsu Earth Environment Charter, to improve the level of environmental conservation activities by overseas subsidiaries and reduce environmental risks. After visiting subsidiaries in China in 2007, Thailand and Indonesia in 2009, and India in 2010, Komatsu representatives visited our subsidiary in Brazil (KDB, Komatsu do Brasil Ltda.) in FY2011 to inspect the facilities and exchange views on environmental matters. Komatsu also inspected the premises of the local wastedisposal companies that the subsidiaries use. At KDB, activities such as saving energy, evaluating air and water quality, and separating waste materials were being diligently pursued. Moreover, KDB has implemented measures to lower environmental risks by, for example, voluntarily replacing roof slates containing asbestos. We found no critical

environmental risks at KDB. Komatsu plans to continue environmental inspections in overseas subsidiaries in the future, to promote sound environmental practices for the Komatsu Group as a whole.



Water Treatment Facility for Waste from Electrostatic Coating

Environmental Audit of Chinese and Indonesian Subsidiaries

In FY2010 we began compliance-risk audits for overseas subsidiaries, and in FY2011 we audited KCCM and KSD in China and KI in Indonesia. Komatsu Headquarters prepared check sheets for the audits based on local environmental laws and regulations. With the support of the environmental administrator from the mother plant of each overseas subsidiary, we audited environmental activities and compliance with environmental laws and regulations, and implemented measures to reduce environmental risks and improve

the skill level of local environmental administrators and auditors. In addition to conducting follow-ups for the current audits, we will conduct environmental audits for overseas subsidiaries in other regions in the future.



Paint Booth and Dust Catcher

Promoting Environmental Activities at Group Sales Agencies

Komatsu's support for environmental activities extends to forklift sales agencies, as well as construction machinery and rental companies, through education and guidance on ways to enhance environmental management.

The Environmental Guidelines for Sales Agencies comprise guidelines and standards pertaining to environmental issues that are of direct relevance to operations at sales agencies and rental companies. These include waste treatment, waste-oil treatment, oil-and-grease management, and treatment of wastewater from vehicle washing.

Komatsu assists sales agencies and rental companies in meeting the provisions of the Environmental Guidelines. The company also assists in reviewing the environmental aspects of operations, conditions, and equipment at the relevant business sites of the agencies and companies, gives on-site guidance, and proposes remedial actions that are tailored to each site. This is done through joint visits to each of the sites by persons in charge of environmental management at Komatsu and at the sales agencies and rental companies. (In FY2011, 156 sites received this assistance.) As a result, awareness of the environment has risen at agencies and companies, and various

improvements are underway. In addition, Komatsu Con-

struction Equipment Sales and Service Japan Ltd., Komatsu Rental Ltd., and Komatsu Forklift Japan Ltd. are implementing activities to reduce CO₂ emissions and save energy.



An Office that Installed LED Lighting (Hanshin branch office, Komatsu Construction Equipment Sales and Service Japan Ltd.)

Supporting Suppliers in the Introduction of Environmental Management Systems

To reinforce environmental management at our suppliers, Komatsu required the Komatsu "Midori-kai" group, which accounts for about 75% of the value of procurements, to have all its group companies acquire EMS certification. By FY2008, all 126 business associates in Japan had acquired EMS certification. From FY2009 to FY2011, 29 business associates newly acquired certifications, adding up to a total of 155 business associates (all applicable businesses) with certification, promoting environmental management activities.

Mitigating Climate Change

Komatsu is reducing CO₂ emissions generated by its business activities while delivering products that help customers promote their environmental activities.

Mitigating Climate Change through Products and Services

Market Launch of the WA380-7 Medium-Size Wheel Loader

Our new wheel loader model, the WA380-7, meets the EPA Tier4 Interim and EU Stage IIIB emission standards, with significant cuts in nitrogen-oxide (NOx) emissions of 45% or greater and particulate-matter (PM) emissions of 90% or greater as compared with the rule. In addition, we have achieved a 10% improvement in fuel consumption (compared to previous models), thanks to a large-capacity torque converter that delivers high torque at low rpm, coupled with Komatsu Smart Loader Logic, which optimizes the control of the engine torgue and rpm in an integrated fashion, to handle both the hydraulic system load and the running system load. With the development of wheel loaders compliant with EPA

Tier4 Interim emission standards now complete, the PC200-10, D61-23, D155-7, WA500-7 and HM400-3 models are on a waiting list for market launch, following in the path of the WA380-7. (some models have done)



FH40-1 / FH45-1 / FH50-1 Hydraulically Driven Forklifts

New FH40 / FH45 / FH50-1 forklifts, which combine the best in construction equipment hydraulics and control technologies, will be launched in July 2012. The new products use Komatsu's exclusive electronically controlled Hydro-Static Transmission (HST), to make them both environmentally friendly and easy to operate. Their reduced fuel consumption will be more pronounced on higher-

load, higher-availability tasks that involve a frequent number of loading/unloading and steering. The new forklifts installed in a paper manufacturing plant since last year attained a reduction in fuel consumption of up to 30% in comparison with Komatsu's previous models.



Automated Machine Control/Guidance System

An Automated Machine Control/Guidance System refers to a construction system designed to improve the productivity of the overall construction process and ensure quality. This is achieved by applying Information and Communication Technology (ICT) to a series of processes, consisting of surveying, design, construction, supervision, and inspection and maintenance. The system also shortens construction periods, improves the operation rates of the

construction equipment, and reduces CO₂ emissions. Moreover, the system "visualizes" the progress of working processes, streamlining the flow of associated processes, such as feeding construction materials and equipment, and also promising cuts in

CO2 emissions. Calculations based on internal test results have shown that the use of one D65PX-16 medium-sized bulldozer will reduce CO2 emissions by 7.9 tons per year. Komatsu has also started selling the Tier4-compliant D65-17 for North America in line with its ongoing efforts to drive global deployment of Automated Machine Control/



Training on the Automated Machine Control/Guidance System (North America)

Guidance System-enabled machinery and equipment.

Machining Center

Komatsu NTC Ltd. has redesigned the structure of its machining center for automotive and other parts and developed a compact energy-saving model, known as the N30Hi. The new machining center cuts CO₂ emissions by 70% or greater during operation, while reducing the installation space by half.



Thermoelectric Modules

Thermoelectric modules are an industrial implementation of the Seebeck effect, in which a temperature difference is applied to two dissimilar metals that are joined together, to produce a current flow between the metals. These modules are available from KELK Ltd. Thermoelectric modules are now used for factory illumination at the Awazu Plant after 13,000 hours of verification testing at its heat-treating furnace. Komatsu is taking part in the implementation of the NEDO project "R&D project for thermoelectric generation by using waste heat in the steelmaking process" to realize practical technologies. If waste-heat recovery is adopted in 50% of the plants in Japan, it is estimated to reduce 1 million tons of CO₂ in annual emissions (electrical conversion: 2.9 x 10⁹ kWh).



Thermoelectric Unit (the Awazu Plant)

voice

Customer in China who Purchased Hybrid Vehicles

Mr. Yongxing Jin Fengxian Nanyue Civil Engineering CO., Ltd



I purchased the HB205 after hearing from a friend who also works in the same business that it had very high fuel efficiency. Even though my work requires many turning operations, the fuel efficiency is extremely high. I have had no malfunctions in 4 months and am extremely satisfied. Because the cost for fuel is 6 times the payroll for operators, and 3 times the cost for equipment repair and replacement parts, I focused on fuel efficiency upon purchase of the HB205.

Fuel consumed per hour: 11.6 l/h Time Span: January 2012 to April 2012 (run time: 698h)

Data

Initiatives to Mitigate Climate Change in Business Operations

Reducing CO₂ Emissions in Manufacturing Operations

As part of our efforts to mitigate climate change, Komatsu has adopted an indicator of CO₂ emissions per unit of manufacturing value with respect to the amount of electricity, fuel gas, fuel oil, and other types of energy used in manufacturing operations. The Company has set a target of 20% reduction in CO₂ emissions by the average in FY2008 to FY2012, compared to the FY2000 level.

In 2011, medium-term goals had been attained ahead of schedule for the sixth consecutive year. The primary impetus came from enhanced production efficiency, which resulted from the inauguration of a new high-efficiency line and the removal of an obsolete line, from the horizontal deployment of various improvements from the Company-Wide Energy Saving Working Group initiative, as well as from other measures.





Main Initiatives in the Manufacturing Division

Demand side	Introducing inverter-controlled hydraulic units in machining facilities Expanding the scope of high-efficiency lighting, including use of LEDs and reflectors Refining drying processes (move to low-pressure air blowers) Energy-saving office patrols Expanding to replace obsolete air conditioners with higher- efficiency models
Supply side	Air conditioning offices using groundwater (trial) Renewing transformers to amorphous transformers Escalating system visualization to enhance demand management

Activities to Cut CO₂ Emissions in Global Transportation

Starting in 2011, Komatsu embarked on a program to improve its understanding of transportation-related CO₂ emissions at 10 key overseas plants. The program calls for improving transportation methods at a total of 25 plants at home and abroad on a globally consolidated basis. Komatsu collected detailed tonkilometer data pursuant to the revised Law Concerning the Rational Use of Energy of Japan, in an effort to evaluate the effects of transporting products overseas. In FY2011, the amount of overseas-transportation related CO₂ emissions registered a 2.3 times of domestic emission with a 3.3 times in the base measurement unit (*). In FY2012, Komatsu will formulate a plan to reduce transportation-related CO₂ emissions globally, focusing

CO2 Emissions of Global Shipment and Base Measurement Units



on improving logistic efficiency for long-distance transportation in China and the U.S.

* Base Measurement Unit: CO2 emissions per unit of cargo weight

Using Nearby Ports to Shorten Land Transportation Distances

The shipping port for products manufactured at the Awazu Plant and bound for North America has been changed from Nagoya/Kobe to Kanazawa, to cut the total distance of land transportation from plant to port by 85% and trim the total CO₂ emissions by 97 tons.



Self-propelled wheel loaders bound for a cargo ship

Enhanced Utilization of Kanazawa Port



Activities to Cut CO₂ Emissions at Suppliers

To help reduce the CO₂ emissions produced by our suppliers, we singled out from our key suppliers three of 41 designated suppliers that have an energy consumption of 1,500 kℓ/year or more (crude-oil equivalent), and supervised and supported these model companies in their efforts to reduce CO₂ emissions. In FY2012, Komatsu expects to reinforce these efforts, expanding upon the success of the campaign to reduce CO₂ emissions to involve other companies, and strengthen the deployment of Komatsu's energy-saving campaigns among our suppliers.

Activities to Cut CO₂ Emissions from Construction Equipment in Operation (Energy Saving Operation Training Session)

As for Komatsu's 20 ton class hydraulic excavators, 30% of the engine operating time is spent idling. During the 70% of operating time during which the excavator is in active operation,

the excavator consumes 20% more fuel than what Komatsu considers efficient. At an energy saving operation training session in Techno Center, Komatsu introduces the following driving method: (1) Use the equipment in an intelligent

manner, (2) Simplify the workflow of

use and driving methods.



Training Session for Energy-Efficient Operation (Izu Techno Center)

construction work, and (3) Eliminate (Izu Techno Center) factors leading to inconsistency and waste. We have attained more than 35% increase in fuel efficiency through more efficient

Reducing CO₂ Emissions in Non-manufacturing Divisions

With the revision of the Act on the Rational Use of Energy, all Komatsu business units are assessing CO_2 emissions in an effort to achieve reductions. The energy consumption of non-manufacturing divisions, including the Head Office building and the Research Division is shown in the table below.

Energy Consumption of Non-manufacturing Divisions (FY2011)

	Kom	atsu	Main	Main sales and after-sales services divisions				
	Manufac- turing (for reference)	Non- manufacturing	companies 41 suppliers	Sales of construction equipment	Rental	Lift		
CO2 (1,000 tons)	166.4	7.1	311.0	4.7	2.4	3.0		
Crude-oil equivalent (1000 k ^ℓ)	91.6	3.9	188.7	2.7	1.4	1.8		

Promoting Recycling

Komatsu promotes the reuse and recycling of used components and strives to improve the recyclability rate of construction machinery through its Reman business. At the same time, the company is stepping up activities to attain zero emissions at Komatsu Group manufacturing facilities.

Promoting the Reman Business

In our Reman business, the Komatsu Group remanufactures used engines, transmissions, and other key components (parts) of construction and mining equipment into "remanned" components that have the same high quality as newly manufactured components. We then put these components back on the market. The Group is promoting the Reman business at ten Reman Centers around the world.

Reman, an abbreviation for remanufacturing, offers the following advantages to customers:

- Quality and performance guaranteed to be the same as new components
- Lower cost for "remanned" components
- Reduced idle time for construction equipment due to adequate inventory of remanned components
- Resource conservation and waste reduction through reuse and recycling of components.

As the global center, Komatsu established PT Komatsu Reman Indonesia (KRI) in Indonesia, which supplies parts, such as engines and transmissions for largesize construction machinery, and PT Komatsu Indonesia (KI), which supplies oil-pressure cylinders. And in Chile, Komatsu established another global center, Komatsu Reman Center Cilie (KRCC), which provides components for electric dump trucks. Additionally, we established PT



Reman Process





Assembly

Performance Testing

Painting

KOMATSU REMANUFACTURING ASIA (KRA) in Indonesia

to exclusively recycle all components of large-size construc-

tion machinery. For countries that are not part of our global

supply chains, such as China, Russia, and India, we have

established individual Reman Centers. In October 2012, we plan to establish the eleventh Reman Center in Brazil.

The Komatsu Group has set up "Reman-Net" as a

network for Komatsu Reman Centers around the world.

The Group is actively using this network to develop Reman operations for reuse and recycling of components at the

IC tags and two-dimensional bar codes are used to

manage each item's remanufacturing history, and to track

quality and durability information. This important information

To further increase the reuse rate of used components

• Developing recycling-related technologies (assessment

parts, high-pressure cleaning, heat treatment, etc.)

to reduce waste components, and thereby further step up

161

2007

and measurement for reuse, manufacturing worn-out

169

2008

157

2009

(parts), the Komatsu Group is reducing the number of

is reported to the Group, to help develop components.

• Developing the exclusive parts for reman, etc

Changes in Reman Ratios (base 2004 = 100)

138

2006

112

2005

100

2004

Providing Reman-related Information

global level.

Future Steps

disposed parts by:

Index(%)

240 220

200 180

160

140

120

100

80

reuse and recycling activities.

240

2011 (FY)

198

2010

Enhancing Quality of Life

Developing People

Data

Effective Utilization of Resources in Manufacturing Operations

Waste

In tandem with reducing the amount of waste produced during manufacturing operations, Komatsu engages in "zero emissions" activities to use waste materials as resources. Starting with FY2011, Komatsu set new medium-term goals for our recycling rate and for the amount of waste generated per unit, and we are working toward those goals. We re-defined the target recycling rate as 99.5% or greater by FY2015 in an effort to attain zero emissions. Transition of sludge disposal from landfill to thermal recycling at Komatsu Castex Ltd. and Komatsu Cabtec Co., Ltd. has boosted the recycling rate significantly from its previous-year level, reaching a total of 99.7% in FY2011.

Komatsu had projected cuts in the amount of waste materials generated per unit of manufacturing value in FY2015 of 20% or greater, compared to the FY2005 level. As a result of strict abherence to separated-waste collection and increased conversion of waste materials to resources, the amount of waste materials generated per unit has been trimmed by 38.9%, compared to the FY2005 level. Komatsu aims to continue its effective separatedwaste collection policy to achieve its medium-term goals.



Amount of Waste Generated by the Komatsu Group Manufacturing Facilities in Japan

Water Resources

In FY2011 Komatsu set a new medium-term target of achieving a 25% or greater reduction in the amount of water used per unit of manufacturing value by FY2015, compared to the FY2005 level. The water-conservation campaign concentrated on manufacturing facilities with extensive groundwater usage located in the Hokuriku District. The company has achieved reductions in the amount of water used per unit of manufacturing value by 39.1% compared to the FY2005 level, through the reuse of water during processing and the elimination of wasteful day-to-day practices.

In particular, the Awazu Plant greatly cut back on its groundwater consumption through measures such as assessment of the wells from which groundwater is taken and installation of water-circulation equipment to heat-treating equipment. As a consequence, the Awazu Plant was able to trim water usage by 40% per unit of manufacturing value.

Komatsu will continue efforts to save water resources to achieve its medium-term goals.





Promoting Onsite Recycling

Promoting Onsite Recycling through Mobile Crushers/Recyclers/Tub Grinders

Komatsu's mobile crushers/recyclers/tub grinders process onsite lumps of concrete, exhumed earth, discarded wood, and other residuals generated at construction sites. Reusing these processed residuals within the construction site has multiple benefits.

The volume of waste generated can be reduced, cutting costs for transport and disposal; fewer new materials need to be purchased, saving costs in resources and materials; and waste is crushed and reduced in volume, curbing CO₂ emissions and transport costs.

Komatsu's mobile crushers/recyclers/tub grinders are now in operation at a large number of construction sites, helping solve the environmental and cost challenges facing customers.



Improving Recyclability Rate

The recyclability rate of our construction equipment has attained a voluntary goal of 99.5±0.5% with the development of construction equipment compliant with Tier4 Interim emission standards (Target of Japan Construction Equipment Manufacturers Association: 97% or greater), thanks to the long-awaited completion of quality validation for chlorine-free hydraulic hoses. Such construction equipment has been progressively put into commercial production from December 2011 to June 2012 (including current commercial models). Promoting the use of chlorine-free hydraulic hoses is being considered to realize higher actual efficiency (actual efficiency rate target of nearly 97% for the Japan Construction Equipment Manufacturers Association).

At the same time, the path for recycling capacitors that are unique to hybrid construction vehicles has been confirmed. Komatsu is seeking for the possibility of recovering precious metals from Tier4-specific diesel particulate filters (DPFs: soot filters) and reusing the filters themselves, Komatsu committed to a continuing plan to address the Tier4 final emission standards.

Effective Utilization of Resources in the Development of Products

Komatsu mobile recyclers (BZ210, BZ200, and BZ120) have been designated as a FY2011 Recommended Technology (NETIS Review Conference, Ministry of Land, Infrastructure, Transport and Tourism). Mobile recyclers are used in the implementation of various types of soilamelioration and ground-improvement work, including road improvement work (such as road-bed banking), river-embankment work, disaster-restoration and

prevention work (such as erosion and sediment CSG), land-development work, soildecontamination work, and soil improvement plants.



Komatsu is committed to thoroughly implementing measures that mitigate and prevent pollution, in strict compliance with the legal requirements of national and local authorities, to minimize the environmental risks that accompany manufacturing activities.

Promoting Legal Compliance and Pollution Mitigation and Prevention

Komatsu Group companies are responsible for periodically reporting and archiving environmental measurement results, in accordance with applicable laws and regulations of national and local authorities. In FY2011, the Komatsu Group had no environmental infraction and no major accidents where the environment was polluted in Japan.

Addressing Soil and Groundwater Contamination

Komatsu has established guidelines for testing soil and groundwater at our Japan facilities, and we perform investigations according to applicable laws and regulations at business units that are to be sold, closed, or demolished. If contamination is found, the Company takes appropriate measures under the supervision of local authorities. We are performing voluntary investigations at currently operating business units to check for contamination from volatile organic compounds (VOC) from cleaning solvents that were used in cleaning and other applications in the past. Komatsu has been surveying soil and groundwater for VOC contamination at Group business units in Japan since 2005. Business units where contamination was detected have implemented countermeasures. The Company chose methods to clean up the sites as quickly as possible. Work at the Oyama Plant was completed in FY2009. In FY2011, change in land character notifications were filed at the Oyama and Koriyama Plants, in accordance with the provision of Article 4, Amended Soil Contamination Countermeasures Act, but no survey order was issued from the administrative authorities because there was no concern over possible contamination. We will continue land-purification work and monitor the situation to ensure that groundwater that does not meet environmental standards is contained on the premises.

Status of Soil and Groundwater Cleanup in Japan

Business unit	Cleanup status	
Awazu Plant	Excavation and removal, soil vapor extraction, groundwater withdrawal and aeration, bioremediation	In process
Komatsu Plant (formerly)	Excavation and removal, groundwater withdrawal and aeration, bioremediation	In process
Osaka Plant	Soil vapor extraction, air sparging, groundwater withdrawal and aeration, bioremediation	In process
Shonan Plant	Excavation and removal, groundwater withdrawal and aeration	In process
Tochigi Plant	Excavation and removal, bioremediation	In process

*: Bio-remediation is purification process of hazardous materials through utilizing micro organisms and returning the soil to a non-hazardous state.
*Surveys revealed no contamination for the Koriyama Plant, Research Division in Hiratsuka,

Techno Center in Izu and Field Testing Department in Oita.

Managing PCB Waste

Komatsu stores PCB-containing waste, such as transformers, in accordance with Japan's "Law Concerning Special Measures Against PCB Waste" and the "Waste Disposal and Public Cleansing Law." In FY2008, Komatsu entrusted PCB disposal to the Japan Environmental Safety Corporation (JESCO). A total of 164 PCBcontaining capacitors were disposed of by FY2010.

In FY2011, JESCO disposed of an additional 68 capacitors and 32 stabilizers. In parallel with the start of disposal of stabilizers at JESCO, a second review was conducted into the status of PCB-containing stabilizers, including those for fluorescent lamps, used in the Komatsu Group in Japan. About 3,500 units were located. Further disposal work will be carried out to locate low-concentration PCB waste as well.

Number of PCB-containing Transformers and Capacitors in Storage

		Number of disposal		of storage	
Company	Site	in FY2011	High density	Low density	
	Head office	0	0	7	
Komatsu Ltd.	Awazu Plant	0	67	112	
	Osaka Plant	59	0	59	
	Oyama Plant	0	313	36	
	Former Mooka Plant	0	0	5	
	Shonan Plant	0	2	1	
	Tochigi Plant	0	5	11	
	Field Testing Department	0	0	3	
	Construction & Mining Equipment Marketing Division	4	0	0	
	Subtotal of Komatsu	63	387	234	
Komatsu	Castex Ltd.	0	0	20	
Komatsu	NTC Ltd.	0	31	0	
Komatsu	Cabtec Co., Ltd.	0	2	12	
Komatsu	House Ltd.	0	1	4	
Komatsu Sales and	Construction Equipment d Service Japan Ltd.	5	22	13	
Komatsu	Rental Ltd.	0	0	1	
	Total of Komatsu group	5	56	50	
	Total	68	443	284	

*The share from the former Komatsu Plant was transferred to the Awazu Plant. Part of the high-concentration waste from the Oyama Plant and PCB-containing capacitors from Komatsu NTC Ltd. will be disposed of within 2012.

*The share from the former Kawagoe Plant is included in the Head office total.

Powder Coating by Komatsu Cabtec Co., Ltd.

Construction of Komatsu Cabtec's powder coating line was completed in 2007. The line uses two coating robots to coat parts such as cabs, doors, and air-conditioner external air covers in the sealed coating chamber. The line's design embodies the following environmental improvements.

- 1) No volatile organic compound (VOC) emissions
- 2) Better coating ratio (95% as compared to 40% for solvent coating, resulting in less coating material being used
- Use of low temperature-curing coatings for lower drying temperatures, thus saving energy (175°C compared with a general drying atmospheric temperature of 200°C)
- 4) Better appearance due to powdering, and fully automated operation realized through visual monitoring of the operating status.



Reducing the amount of PRTR-related substances and VOC released

Most of released PRTR-related substances and VOC are VOC used in paint. In FY2011, the amount of such substances released increased as production increased. Komatsu is making efforts to reduce the amount by (1) shifting to high solid paint and

- (2) improvement in paint application rate.
- * PRTR: Law designed to mandate the disclosure of the amount of specific chemical substances released into the environment to promote the management of such substances (The notification system based on the PRTR Law)
- Names of Class I Designated Chemical Substances and the Amounts Released and Transferred by Group Manufacturing Facilities in Japan (handling 1 ton or more, or 0.5 ton or more

Number under the	Name	Name Amount			Amount released				Chemically transformed or	Amount Contained
PRTR Law		nandied	Air	Water	Soil	Buried	Sewerage	Water	eliminated	in Products
412	Manganese and its compounds	739.2	1.2	—	—	-	—	13.6	-	724.4
80	Xylene	432.8	316.6	—	—	_	—	23.6	90.3	2.2
53	Ethylbenzene	262.6	231.0	—	—	-	—	13.3	18.0	0.4
87	Chromium and chromium (III) compounds	202.0	0.0	—	—	-	—	3.8	_	198.2
300	Toluene	154.8	124.2	—	—	-	—	19.1	8.3	3.3
438	Methylnaphthalene	133.4	0.7	-	—	-	—	—	70.0	62.7
453	Molybdenum and its compounds	59.1	0.0	—	—	-	—	0.0	_	59.1
448	Methylenebis (4,1 phenylene) = diisocyanate	41.8	—	—	—	—	—	0.0	41.4	0.5
296	1,2,4-trimethylbenzene	26.6	3.4	—	_	—	—	0.3	22.8	_
308	Nickel	26.0	0.0	—	_	_	—	0.3	-	25.7
88	Chromium (VI) compounds *1 *2	19.0	0.0	—	_	—	—	4.7	_	0.0
321	Vanadium compounds	15.0	—	—	_	—	—	—	_	15.0
277	Triethylamine	13.3	3.0	—	—	—	—	0.0	10.2	_
132	Cobalt and its compounds	11.6	—	-	_	-	-	1.7	-	10.0
297	1,3,5-trimethylbenzene	9.3	3.9	—	_	—	—	0.4	4.9	_
188	N,N-dicyclohexylamine	7.5	0.5	0.0	_	—	—	6.4	0.3	0.2
258	Hexamethylenetramine*3	6.9	—	—	_	—	—	0.0	6.9	_
392	n-hexane	6.8	5.1	—	—	-	—	0.0	1.7	_
349	Phenol*3	6.2	0.0	—	—	—	—	0.0	5.4	0.7
405	Boron compounds	4.8	—	—	_	—	—	3.2	1.5	0.1
207	2,6-Di-tert-butyl-4-methylphenol	2.4	—	0.0	—	-	—	0.6	0.0	1.8
302	Naphthalene	1.7	0.7	—	—	-	—	0.2	0.7	_
407	Poly (oxyethylene) = Alkyl ether (lim- ited to alkyl carbon numbers 12 to 15 and their compounds)	1.4	_	0.0	_	_	_	0.4	1.0	_
355	Bis (2-ethylhexyl) phthalate	1.3		—		-	—	0.7	-	0.6
71	Ferric chloride	1.2	—	—	—	_	—	1.2	_	_
400	Benzene	0.6	0.0	—	—	—	—	—	0.4	0.2
1.Duri	ng chrome plating, chromium (VI) compounds	become cl	oromium (II	I) compour	de Therefa	re the am	ount transfe	wrod and th	e amount conta	ined in products

are entered. *2:PRTR Class I Specified Chemical Substances

3:Although the amount contained is below the amount that requires registration with the PRTR, we are reporting the data because the amount released exceeds

Reducing the Use of Substances of Environmental Concern and Complying with the EU REACH Regulation

Responding to the increase in environmental awareness around the world, Komatsu has been making efforts from an early stage to reduce the use of asbestos, lead, and other substances of environmental concern. In FY1999, Komatsu stipulated its own list of banned substances and substances approved for use only in limited circumstances (see table below), using as its base the chemical substances banned under Japan's Law Concerning the Examination and Regulation of Manufacture of Chemical Substances Control, as well as other regulations in individual countries. At the same time, Komatsu began comprehensive control of substances of environmental concern. Recently, in compliance with REACH*1, Komatsu is revising our designation of substances approved for limited use, to "to be reduced" and "banned." Through the cooperation of suppliers, the Company

Substances of Environmental Concern Banned or Use Re	duced
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Designation	Number of Substances	Name							
Banned	10	Chromium (VI) Cadmium PBB/PBDE ^{v3} Tri-substituted Organotin Compounds PCB Asbestos Specified chlorofluorocarbons / hydro chlorofluorocarbons (HCFCs) Trichloroethylene Triethanolamine							
To be reduced (Subject to limited use)	16	-Lead ·Mercury' ¹ ·Arsenic ·Selenium ·Hydrofluorocarbons (HFCs) -Specified prithalate ester (DEHP/DBP/BBP, DIBP *3) -Specified polycyclic aromatic hydrocarbons (PAH) - PFOS (Perfluorocatnesultonic acid) *3 - DBT / DOT(Dibutythin compounds / Dioctyloxotin compounds) *4 -Wathanal ·Hoxachlerobaroana							
Substances of Very High Concern (SVHC) under the EU REACH Reguleation	Subtances of Workpoint Workpoint Workpoint Workpoint Workpoint Workpoint Workpoint Workpoint Workpoint Workpoint Workpoint (73) ⁵ DEHP / DBP /								
*1: REACH: I *2: Diethylhe	I: REACH: EU regulations for Registration, Evaluation, Authorization and Restriction of Chemicals 2: Diethylinewo phthalate, dirichylur phthalate, dirichylur phthalate,								

Deturyine two printalate, obcuy printalate, berzy buty printalate, bisobuty printalate Under review for stricter limits due to regulatory trends. Under review for stricter limits due to regulatory trends. The number of substances registered up until December, 2011 (progressively updated). Includes materials that are not contained in Komatsu construction equipment. *5: The number

and Transferred at Komatsu Group Manufacturing Facilities in Japan Xvlene 14.6% Ethylbenzene 10.6%



Breakdown of the Amount of PRTR-related Substances Released

Changes in the Amounts of PRTR-related Substances Released* at Group Manufacturing Facilities in Japan



Amount of VOC Released by Group Manufacturing Facilities in Japan



has initiated a system to strengthen control of substances of environmental concern in products. This system has been deployed in Japan and Europe, and is also being implemented in other overseas subsidiaries.

By using this system, we identify SVHC (substances of very high concern) in vehicles not only for shipment to and currently in production in EU, but also identification of SVHC in newly developed vehicles. Furthermore, we also regularly check for new SVHCs that are continuously added to the list.

There are currently 73 (SVHC) registered, however more are added on a bi-yearly basis. Komatsu has devised a workflow to control these substances, and we are currently reviewing its implementation.

Control System for Substances of Environmental Concern



Disaster · Relief and Recovery

Amid concerns of serious power shortages due to the effects of a nuclear power plant disaster caused by the Tohoku earthquake. Komatsu's key plants in Japan have begun to implement drastic energy-saving measures and to use private power generator in an effort to reduce the reliance on power supplied from electric power companies.

Power-Saving Activities

Komatsu has continuously pursued both productivity improvements and energy-saving activities.

After experiencing power shortages in the service areas of Tokyo Electric Power Co., Inc. and Tohoku Electric Power Co., Inc. during the summer of 2011, it is anticipated that power shortages will occur during the summer of 2012, and will include the service area of Kansai Electric Power Co., Inc., as well. In response to this, Komatsu will be implementing large-scale reductions in power consumption. Our goal is to cut summertime peak power needs by 25% in 2012 and by 50% in 2014, compared to consumption levels in 2010. We also plan to limit consumption to reduce the environmental impact from CO2 emissions.

- The fundamental methods for power reduction that we will use are:
- Electricty utilization control to eliminate waste by realizing lower energy requirements
- Outilizing alternative energy sources
- 8 Revamping production

Specific measures for achieving these goals are summarized below. By adapting these ideas, we plan to establish new plants that require only half the energy our current facilities use to operate.

Reducing waste by realizing lower energy requirements Reducing waste Improving efficiency by modernizing utility equipment





Less than 5 yrs 5 to 9 yrs 10 to 19 yrs 20 to 29 yrs 30 yrs or more (service age

Centralized power and facility monitoring

Outilizing alternative and natural energy sources Groundwater- and waste-heat-



Natural Daylight Illumination Daylight zon Conduction zon Diffusion zon

logies **Biodiesel Fuel (BDF) Project**

The Biodiesel Fuel (BDF) Project was launched in 2009 to produce biodiesel fuels (BDF) from jatropha and other plants at the Adaro Mine in Indonesia to fuel Komatsu dump trucks. In 2010, Komatsu built a pilot plant for BDF production, along with a laboratory to ensure the quality of the BDF in production. Since 2011, testing has been carried out on Komatsu BDF-fueled dump trucks at the Adaro Mine, to aid in our manufacturing quality assurance. So far, no major problems have been encountered. This project is a business model for local production and local consumption, and is carbon neutral. For example, there are future plans for 20% of light oils for 1000 dump trucks to be converted to biodiesel fuel. This will enable 200,000 tons of CO2 emissions to

8 Revamping production

Power savings from a production engineering standpoint







Intermittent facility operation and removal of cooling equipment



Reduction of welding mass through high-precision welding



Evolution of Productivity Improvements and Energy Savings



be eliminated, which is an amount equal to the annual CO2 emissions of Komatsu manufacturing facilities in Japan.



View of the pilot plant

Developing People

Growing with Society

Enhancing Quality of Life

Data

Enhanced Safety

Safety is one of Komatsu's main concerns as we expand our business. In addition to enhancing the safety of our products and services, we also emphasize safety at customer sites and the workplaces of our employees and our business partners.

Enhanced Safety at Customer Sites

ICT, environment, and safety are very important considerations in Komatsu's product development. In addition to supplying products that provide superior safety performance, we also strive to prevent accidents and failures. We do this by making recommendations and holding lectures together with our distributors, to ensure that the machinery at customer worksites is operated safely.

Content of Safety Workshops

(based on case studies of construction equipment sales in Japan)

- Know-how in safety management and risk aversion
- Safety measures based on past experience
- Safe operation of different types of construction equipment

Initiatives for Business Partners

Please refer to "Together with Business Partners" on page 41.



Improving the Level of Safety Management - Safety initiatives at a plant in China -



Zhaojin Bu Deputy General Manager, Safety and Environment, Komatsu Shantui Construction Machinery Co., Ltd.

Our Company produces hydraulic excavators marketed by the Komatsu Group in China. We have been promoting safety activities since we were established in 1995. However, we have carried out a through review of our safety activities, in part as a response to a increase in the number of accidents that occurred in 2009 and 2010 as our production volume increased. We implemented a number of new measures, including reinforced safety patrols, improved KYT (Danger Prediction Training), and introduction of a safety diary. Then, to firmly establish "Point and Call" activities, which are essential for a safe working environment, we organized a skill contest for crane operators, which I would like to introduce here.

"Point and Call" refers to a safety inspection process that requires people to point and call out to confirm that all is safe before starting any onsite work. Until now this method had not taken root in China, because people were embarrassed to point their fingers and call out loud in front of others. At the crane-operator skill contest, operators perform their usual crane work while pointing repeatedly to confirm individual steps, such as confirming the placement of the load, the condition of the hanger hooks, and the position of the target

Initiatives to Ensure the Health and Safety of Employees

Our company issues our President's message on occupational health and safety, and in April 2011, "Occupational Safety and Health Policies" were newly incorporated in Komatsu's Worldwide Code of Business Conduct. These policies will be promoted through joint activities by the Company and our employees.

>>> http://www.komatsu.com/CompanyInfo/profile/conduct/#c05

The Group will foster occupational safety, mainly through small-group "zero accidents" activities held on a fullparticipation basis. While continuing to upgrade safetyrelated education and training, the Group aims to support safety activities at Group companies around the globe. We will continue to strengthen our Group-wide health and safety system and implement mental and physical healthcare management to promote employee health as well.

http://www.komatsu.com/CompanyInfor/csr/2012/1-1.html

location. Operators are evaluated according to the number of times they point to confirm various elements, and the one with the highest number of points is given an award. This contest has been held since FY2010, and it is thought of

as a kind of "Olympics" for work safety. While in the past "Point and Call" had been practiced only 40% of the time, the rate has now risen to nearly 100%, and the number of accidents has decreased.

Although safety activities have been successful, it is very important for these efforts to continue. We will continue to improve the level of safety management and promote further safety activities.



Contestant pointing at the "Point and Call" contest



Award-winning contestants

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CSR 2 Developing People

Key Activities

- Contributing to human resource development in local communities
- Enhancing our employees and suppliers through The KOMATSU Way (employees and business partners in the supply chain)
- Enhancing our employees and distributors through brand management (employees and distributors)



Using communication as a foundation, we want to create a safe, comfortable workplace environment where everyone's abilities can be fully utilized.

Masanao Mori

Executive Officer, GM, Human Resources Supervising Education and Safety & Health Care, Komatsu Ltd.

The theme of "respect for employees and their fundamental human rights" emerged when Komatsu was deciding on CSR priorities. Could you explain the corporate stance towards this theme?

Mori: Every one of our employees is a valuable asset to our company.

Upholding their fundamental human rights, and respecting their personality and individuality, is our basic personnel policy around the globe.

So what specific measures do we take? People often talk about improving labor conditions and the working environment, but I believe the most important thing is communication with employees.

As outlined in The KOMATSU Way, the Company endeavors to provide an environment where top management can communicate with employees individually, to explain the company's point of view and to listen to opinions and questions from employees. Examples of this include employee meetings held with the President after the release of our half-term performance records, onsite meetings at domestic manufacturing facilities and overseas manufacturing subsidiaries and the dialogue sessions periodically held between the Company and labor unions and employee

representatives. By building a trusting relationship between the company and its employees through honest discussion and debate, the company develops further and the lives of our employees are enriched. To create win-win situations such as these, I believe that daily communication and the sharing of information are vital.

Do you have measures regarding human rights and employment from a global perspective?

Mori: What is essential when reviewing personnel policies from a global perspective is to recognize and understand how personnel systems differ depending on the region and how they reflect each region's historical and cultural background. It is therefore necessary to consider regional conditions and deploy systems and policies suitable to that area.

In Japan, for example, because of the continuous reduction in the labor force due to declining birthrates and the aging population, it is important to provide an environment where women and retirement-age employees can participate more actively.

In China, people talk about what is called "Evolution Space," which concerns how much their career can develop within the work to which they are committed. Providing younger employees with such an environment and improving the relevant personnel systems are thus very important.

In light of this, I think one factor that is common throughout the world is, as I mentioned before, the importance of respecting the personality and individuality of each employee, creating opportunities where they can work in safe, comfortable and healthy ways and also find their jobs to be rewarding. It may sound a little dramatic to talk about global measures, but to give one example, we are presently working on a plan to improve eating facilities for plant workers. Eating is a great source of enjoyment for workers. Now that we have completed the initial stage of investment in production equipment, we are stepping up our efforts to refurbish employee welfare services, such as worksite cafeterias and the working environment.

From here on, we plan to take in the needs of employees through daily communication with them.



Worksite cafeteria at the plant in Changzhou, China, refurbished in June 2011. Communication between employees and the company leads to an improved work environment.

Komatsu has historically focused on developing human resources, but what are some of the the company's recent initiatives?

Mori: For the last few years the consolidated number of Komatsu employees has increased rapidly, in pace with our corporate expansion, rising about one and a half fold compared to ten years earlier. Especially in strategic markets such as those in emerging nations and resourcerich nations, the rapidly increasing number of employees working in production and as dealer servicepersons has resulted in a proportionate increase in numbers of newer employees.

In Japan at Komatsu alone, 40% of our employees have been working at the Company for less than five years. Further, skilled workers have been reaching mandatory retirement ages in large numbers in recent years.

Under these circumstances, we have made urgent efforts to convey the values of The KOMATSU Way to our newer employees. As we pursue global operations, manufacturing products and delivering services with consistent quality across the world cannot be achieved if we all work differently from one another.

The KOMATSU Way is a statement of our strengths and values that can be handed down from generation to generation.

Today the scope of transmission of these values is no longer confined to worksites in Japan, but extends globally. That is why The KOMATSU Way was put into a statutory formal document.

In practice, the values and concepts of The KOMATSU Way are not learned by reading, but are acquired through work experience. We want employees to first experience The KOMATSU Way in a real-life situation before consulting a booklet. Thereby, they can develop experience and gradually come to understand the principles of The KOMATSU Way.

Having the framework of The KOMATSU Way in place, what organized approaches do you take to develop human resources?

Mori: Komatsu maintains education systems organized by occupational hierarchy and function on the basis of the underlying concept of globalization that is Japan-based, not stateless.

Our management policy is to promote regionally recruited employees to manage regionally incorporated companies. They are trained to understand and share the values of The KOMATSU Way, as well as learning management strategy through activities such as global management seminars. A business-leadership training program is held in Japan to help executive candidates quickly grow into future company leaders. This program will be extended to cover employees at overseas affiliates in China and Russia. Sometimes even young executives at our business partner companies take part in the program.

We will continue to administer expert courses on global construction equipment to foster after-sales service personnel leaders, conduct global technical competitions among employees working in manufacturing, and promote peopleto-people exchanges between mother and child plants to consolidate working abilities thorough on-the-job training at worksites, so that Japan's excellent tradition of manufacturing (Monozukuri) and technical skills will be disseminated to locations overseas.

The responsibility that a corporation fulfills to its employees should not only involve payment in exchange for labor. It should also create opportunities for education and development, and enrich employees' lives through their work and through personal relationships.

Above all else, it is most important to provide our employees with a safe and comfortable work environment.

Accelerating the Pace of Global Human Resource Development

- Training Personnel to Support Construction and Mining Machinery Around the World -



The Mounting Demand for Natural Resources and the Availability of Human Resources in Africa

In 2011, as the world's population topped 7 billion people, the planet is facing a serious challenge in ensuring a stable supply of energy resources, as well as food and water. Africa, a resource-rich continent, has undergone a boom since the beginning of the century, thanks to the surging prices of natural resources.

But, at the same time there are increasing demands for the mining equipment needed to exploit those resources. Consistent production of resources requires not only the deployment of mining equipment, but also mechanics who are qualified to service the machinery and keep it running.

In African nations with few local industries, customers who own machinery increasingly depend on our distributors to troubleshoot and service their machinery on a daily basis because of the difficulty they have in hiring their own mechanics. Our distributors are adding to their staff of service engineers, but they have a similar difficulty employing experienced personnel, making it an urgent task to provide basic education on machine maintenance, as well as securing the necessary human resources.

Training Centers in Collaboration with Distributors

Komatsu not only offers curricula and teaching materials through our overseas affiliates to help distributors develop human resources, we also give experienced engineers direct access to more advanced training.

As part of our long-term commitment to training instructors and mechanics in the African region, we established two Komatsu Training Centers, one in Dakar, Senegal in 2009, and the other in Nairobi, Kenya in 2010. We are steadily increasing support for the development of human resources for our African distributors.

At these Training Centers, trainees are grouped into teams of six, and receive one month of tutorials and two months of on-the-job training, which is repeated three times over the course of a nine-month curriculum. As of March, 2012, 62 mechanics had completed the basic course.

Supporting Human Resources Development by JICA

In Senegal, the Vocational and Technical Training Center (CFPT) has been administered by JICA (the Japan International Cooperation Agency) since 1984. It was decided

KC Techno Center Opened in Changzhou, China

The KC Techno Center opened in January 2011 in the Chinese Province of Changzhou. The center is a large complex of 220,000 square meters, serving as a machine demonstration of Komatsu Group's products, a comprehensive training center, and a used equipment center which will also accommodate Reman products. The new comprehensive training center implements a fully integrated program of technical training, not only to enhance the skills of service engineers, but also to train newly hired employees for Komatsu distributors. It also administers various training courses for midcareer employees and executives of Komatsu overseas affiliates in China, covering the fields of development, outsourcing, marketing, product support, finance, busi-

ness administration, human affairs and TQM to teach The KOMATSU Way.



KC Techno Center Staff

Data

that a heavy-construction equipment-maintenance training course would be added to the existing curriculum, and Komatsu has undertaken the responsibility of supporting the administration of the class after a request from JICA.

To prepare for the opening of class in October 2012, we first need to cultivate instructors, so two JICA Instructors are now undergoing training at the Komatsu Training Center in Dakar. After the class begins, the Komatsu instructors will visit from Dakar to conduct lessons and invite students to Dakar to provide training with real machinery.

We would like to support local human resource development in this way, contributing to the increase of employment opportunities, and enhancing the quality of human resource development in the industry.

Affiliations with National Private Institutions

In rapidly developing strategic regions other than Africa, where development of human resources is urgently needed, we are arranging training classes in conjunction with local private facilities.

In China, the number of mechanics on staff increased by more than 900 in FY2010 compared to the previous year. Estimates suggested that comparable increases in new recruits would be needed in fiscal FY2011 and thereafter. For this reason, we have been working to speed up the training of new mechanics by partnering not only with the facilities at Komatsu and its distributors, but also with universities and vocational colleges. One example of such collaboration is the expanding scope of a new employee training program that has been pursued jointly with the Shandong Jiaotong University in the Chinese Province of Shandong since FY2004. Under this program, new Komatsu service engineers, who come from all over China, acquire the basic concepts of construction equipment and maintenance over a period of approximately six months. Some graduates have been promoted to managementclass positions as mechanics, and act as leaders who support their workplaces.

In addition, Komatsu distributors located in various provinces of China have affiliations with local vocational colleges, integrating Komatsu courses into college curricula and providing specialized education using the distributors' instructors.

Similar efforts are underway in the CIS (Commonwealth of Independent States) regions, Brazil, and elsewhere, accelerating the pace of global human resource development.



Graduation Ceremony for the Komatsu Construction Equipment Course Students of the Shandong Jiaotong University (February, 2012, 209 graduates)

Promoting Affiliations with Private Facilities

Region and Timing	Affiliations
Turkmenistan April 2011	Komatsu construction equipment mainte- nance course opened at Turkmen Agricultural Institute
Yaroslavl, Russia April 2011	Construction equipment maintenance course opened at Yaroslavl State Technical University
Khabarovsk, Russia September 2012	Construction equipment maintenance course will open at Pacific National University in Khabarovsk
Brazil July 2011	Long-term education courses opened at a National Service for Industrial Training
Shandong, China March 2004	Specialized courses inaugurated at Shandong Jiaotong University



Thankful for Japan and Komatsu's Assistance with the Vocational Training Center



Ousseynou Gueye The Vocational and Technical Training Center (CFPT) Director

In 2006, when Mr. Kayata, President, Overseas Marketing Komatsu Ltd. at the time visited the CFPT in Dakar as part of his official tour of Senegal, we emphasized the serious need to develop human resources to maintain heavy construction equipment.

Senegal is suffering from a serious shortage of experienced technicians in public works, road construction, mining, and logistics. After requests from the government of Senegal to the Japanese government in August 2008, Japan said it intended to offer aid in the form of a grant to the Senegalese government in March 2011.

In line with this, since October 2011, JICA has supported

a project to train high-level engineers qualified to maintain heavy construction equipment -the first project of this kind to be implemented in West Africa- under a technical cooperation program which involves:

- Dispatching Japanese experts to CFPT
- Enhancing the skills of Senegalese instructors to ensure the proper operation of training programs
- Reinforcing ties between Komatsu and CFPT to support future employment opportunities for engineers

Since CFPT instructor training through the Komatsu Training Center in Dakar launched in January 2012, Komatsu has offered substantial contributions to the project. Komatsu's training facilities have been so highly acclaimed that there is a chance that Komatsu may develop a partnership with the CFPT in the future. It is our hope that this partnership will eventually extend beyond the industrial field in Senegal, the key beneficiary of the project, to reach other African nations.

I would like to offer my repeated thanks for the technical support enabled by the collaboration of JICA and Komatsu. I firmly believe that this support will not only stimulate further socioeconomic growth in Senegal, but also promote vocational and technical training for the younger generation.

Creating the Right Working Conditions for Everyone

Employees of the Komatsu Group companies are an indispensable asset for the Group. The Group seeks to foster a safe and comfortable work environment, while maximizing opportunities for employees.

Global Personnel Policy

Personnel systems reflect the history and culture of each particular region. It is therefore important to recognize and understand those differences.

Based on the basic policies outlined below, the members of the Komatsu Group are creating a personnel system tailored to the needs and reflecting the circumstances of each particular region.

Komatsu's Worldwide Code of Business Conduct (Chapter 5 Section A)

- 1 We shall respect each employee's fundamental human rights, inherent personality, individuality, and legally protected privacy.
- 2 We shall treat and appraise each and every employee in a fair and impartial manner. We shall not discriminate against any employee on the basis of nationality, race, religion, age, gender, physical or mental disability, or other legally protected attributes that are irrelevant to his or her performance. We shall vigorously endeavor to promote equal opportunities for employment and eliminate harassment in the workplace.
- 3 We shall endeavor to provide employees with workplaces where they can seek a good balance between their private and professional lives, while effectively accomplishing their respective tasks with satisfaction and pride.
- 4 We shall endeavor to design and administer the system of human resource manage-
- ment in a manner that is most reasonable and persuasive to the employees. We shall make such systems open and clearly explain them to the employees to the maximum extent practicable.
- 5 Komatsu Group companies shall comply with all applicable laws and regulations governing employee rights in the jurisdictions in which they operate, and faithfully accommodate, wherever applicable, conversations or discussions with employees or their representatives.
- 6 We shall not tolerate child labor or forced labor.
- 7 Komatsu Group companies shall endeavor to offer to their respective employees those terms and conditions for employment that are sufficiently competitive in their respective regions.

Enhancing Work-Life Balance

Reducing the Total Number of Working Hours

Reducing the total number of working hours is a key factor in achieving a healthy work-life balance for employees. In Japan, for example, Komatsu has worked in coordination with labor unions on this issue to formulate numerical targets, which are now set at 2,100 or fewer working hours per year, and at least 16 days of paid leave taken per year. Efforts are continuing to achieve efficient working conditions through measures such as the formulation of an activity schedule for each workplace.

In 1991, an employee volunteer incentive program was established, providing for a maximum of two years of paid leave and a maximum of 12 days per year of special leave. Furthermore, the company has awarded the President's Volunteer Award to 37 employees who dedicated themselves to long-term out standing service to society. As for support for reconstruction in the areas devastated by the recent Great East Japan Earthquake, the company cooperated with labor unions to pay a transportation allowance to employees traveling to the disaster-stricken regions as volunteers.

>> http://www.komatsu.com/CompanyInfo/csr/2012/2-2.html

Main programs and measures designed to enhance work-life balance

P	rogram/Measure	Description			
Childcare su	Childcare leave program	Available for a maximum of three years from the birth of the child to the time the child enters nursery school Also available for a maximum of three years for children up to the third year of elementary school in cases where a spouse is transferred, etc.			
Inoddr	Pregnancy, maternity, and childcare leave	5 days during pregnancy (for women) 5 days when an employee's wife delivers (for men) 5 days for infant care (for both men and women)			
	Part-time work	Shortening of working hours by a maximum of 3 hours per day to allow for care of children up to the third grade of elementary school			
	Allowance toward the cost of using childcare services defore entering nursery school (10,000 yen/month)				
	Nursing leave	5 days leave for nursing care of one child up to the third grade of elementary school, and 10 days for the second child onward			
Care	Family-care leave program	A maximum of 3 years available to employees taking care of family members			
dus	Part-time work	Shortening of working hours by a maximum of 3 hours per day			
port	Care leave	5 days per year for attending to one family member in need of nursing care, and 10 days for the second family member onward			
Other leave	Accumulated annual leave	Accumulation of a maximum of 40 days of unused annual leave An employee can add 5 new days of accumulated leave, not to exceed 10 days per year Can be used as sick leave, to take care of sick preschool children, or for care for family members			
progr		Provided to encourage employees to take 5 consecutive days of leave for their mental and physical rejuvenation			
ams	Flexible leave	Employees receive an additional 5 days of annual leave and a travel voucher the year they complete their 15th, 25th, and 35th year of continued service			
	Volunteer incentive program	Long-term paid leave of up to 2 years, or short-term paid leave of 12 days per year			

Establishment of In-House Nursery "Komatsu Kids Oyama"

To create a work place that is appealing for parents, "Komatsu Kids Oyama" was established in the Oyama Plant located in Tochigi on February 1st.

Because in recent years, the number of female employees and employees with children has increased, to achieve a workplace that is safe, reassuring and appealing for such individuals, a daycare was established so that parents can entrust their children close to their workplace or have support when recovering from parental leave.

"Komatsu Kids Oyama" is available for open enrollment for the childen of employees, including small children. The nursery initially began with 7 children but plans to expand to accommodate 30 children in the next 2 years.



Komatsu Kids Oyama, Nursery Room

The KOMATSU Way and Human Resource Development

The development of global human resources is an ongoing theme for the Komatsu Group. In addition to disseminating education in The KOMATSU Way so that it can be shared by employees worldwide, the company has set up a system geared toward training professionals in various fields.

Revision of The KOMATSU Wav

The KOMATSU Way clearly defines the company's quiding principles, cultivated by past generations and based on the spirit of the company's founders. These include principles covering Komatsu's strength, attitude toward working at Komatsu, and basic patterns of behavior. In FY2011, five years after its formulation in 2006, we reviewed The KOMATSU Way to make it more coherent and easier to understand, not only for Japanese employees, but also for those at our overseas subsidiaries.

In addition, we created a "Brand Management" section and added the CSR concept.

(Komatsu's initiatives in Brand Management are described in more detail in the Special Story 1 on page 9)





From the contents of The KOMATSU Way

- I. Introduction / What is the KOMATSU Way?
- I. Top Management
- I. Seven Ways of KOMATSU πz Brand Management

Key themes of the Management Section (Summary)

- Top management shall act with awareness of CSR, always have familiarity with the workplace, and formulate management policy based on analysis of data from the workplace
- Make sure to hold Board meetings regularly. Thoroughly discuss the agenda items through these steps: Reporting/Discussions/Resolutions.
- Top management should explain in their own words, the current conditions and future direction of the company to all the stakeholders including employees.

>>> http://www.komatsu.com/CompanyInfo/csr/2012/4-3.html

Human Resource Development and Training Structure

Komatsu strives for sustainable growth of both the company and employees through human resource development. Our policy is that "each employee should set high goals, be self-reliant and self-motivated in acquiring knowledge and skills" and that "the Company should support employee career development through the implementation of necessary education for both the Company and employees in a focused manner."

While fulfilling the education of professionals in a variety of fields, the Company also supports the acquisition of knowledge and skills at every level within the Company. Regular explanatory sessions and discussions are convened at Group companies to disseminate The KOMATSU Way and incorporate it into human resource development around the world at each level of the company hierarchy, as well as to allow this knowledge to be handed down to younger generations.

>> http://www.komatsu.com/CompanyInfo/csr/2012/2-3.html



The Komatsu Education System Role image

Age group

Growing with Society

Key Activities

Engaging in dialogues with our stakeholders

- Providing social contributions through the use of our core technologies and resources (e.g., disaster relief or activities to remove antipersonnel land mines)
- Contributing to our local communities where we do business
- Strengthening our corporate governance and compliance
- Promoting compliance with environmental, labor, and social norms within our group and among business partners



Carrying out Community Based Activities While Listening to the Voices of Our Stakeholders

Fusao Seki

Senior Executive Officer Supervising Corporate Communications, CSR, General Affairs and Compliance Komatsu Ltd.

The importance of corporate social activities is growing, worldwide.

Seki: When doing business, an enterprise must not only operate safely and responsibly when it comes to the environment, but it is also essential that it maintain a social role within the local community.

Though Komatsu defines CSR activities as "providing social contributions through the use of our core technologies and resources," it also places a high value on local community activities. First among these activities is support and relief work in response to catastrophes, such as natural disasters. When natural disasters, such as earthquakes, tsunamis, hurricanes or floods strike, there is an urgent need for construction and other equipment to restore and reconstruct the disaster-stricken areas. At Komatsu, regional plants and local subsidiaries have been among the first to identify the requirements of affected areas in times of disaster and deliver the needed equipment.

Another local activity we are engaged in is a project to remove anti-personnel landmines, utilizing technology and expertise developed through Komatsu's business activities. In 2003, Komatsu embarked on the development of a demining machine, and since 2008 we have helped remove landmines in Cambodia and Angola, in collaboration with the Japan Mine Action Service (JMAS), a non-profit group of demining specialists registered in Japan. Leveraging our construction machinery, Komatsu has embarked on the Safe Village Creation Project, which begins by making an area secure using the demining machine, and then builds up

the necessary infrastructure for the community - roads, fields, schools and the like.

One factor that these ongoing activities have in common is that they are based on local community needs.



Komatsu Demining Machine at Work in Cambodia

ata

To understand local needs, it is important to maintain a dialogue with the community.

Seki: To us, people in local communities are very important stakeholders. Komatsu has a global network of manufacturing sites, offering opportunities for dialogue at individual plants, briefing of local government and community representatives on the status of our corporate activities, and listening to community needs.

In addition, Komatsu greatly values dialogue with its stakeholders, which include business partners, employees, shareholders and investors. Company leaders personally attend global distributor conferences and assemblies of the "Midori-kai," a group of our company's business partners who support our production activities, to explain the details of Komatsu's business performance.

In the past, we relied on our daily marketing and sales activities to offer opportunities for dialogue with our customers. Now, however, Komatsu has begun Brand Management Activities to promote integrated and well-organized dialogue with customers on a global and companywide basis (see page 9).

From a CSR perspective, we need to identify various potential risks that may be difficult to recognize in the course of daily business activities, while also understanding social requirements from a global viewpoint and reflecting these requirements in our management conduct. To this end, Komatsu will strive to remain responsive, while working closely with our various departments.



Plants "Open House" day offer a better understanding of Komatsu's activities to local residents. (A view of the Ibaraki Plant "Open House" held in November 2011)

We carry out CSR activities with our business partners across the entire supply chain.

Seki: For example, when considering the environmental issues associated with the manufacture of a product, it is now standard practice to estimate how much environmental impact the product will cause throughout its lifecycle, from material procurement and production to sales, operation and eventual disposal. This also holds true as an approach to social issues. Not only does Komatsu need to maintain a CSR mindset, but all our business partners must work together with us in a concerted effort to resolve issues.

Through ongoing communication and cooperation, Komatsu has been working with our business partners to solve environmental, safety and compliance issues over a extended period of time. In FY2011, Komatsu formulated the CSR Procurement Guidelines, a summary of Komatsu's expectations from its suppliers, to define their roles in a more codified manner.

The guidelines are based on Komatsu's previous communications via the Worldwide Code of Business Conduct and other means, to convey the conditions we require of our suppliers. We plan to use the establishment of these guidelines as an opportunity to pursue educational initiatives and promote CSR activities throughout the supply chain.

Looking at the supply chain from a global perspective and beginning with human rights issues, we recognize numerous tasks and risks that are on a different level from those in Japan. Considering these issues, Komatsu will work with our various internal departments to consolidate approaches to addressing them.

How is Komatsu undertaking compliance?

Seki: In FY2011, Komatsu revised our Worldwide Code of Business Conduct, the framework of our compliance activities.

Komatsu's Worldwide Code of Business Conduct is a collection of rules we abide by in business society. The revised version of Komatsu's Worldwide Code of Business Conduct not only defines the rules, laws and regulations that are generally respected in business society, it expressly specifies being aware of CSR as an essential part of compliance with these rules, to earn the trust of society.

The revision process involved a consciously global perspective, and instead of simply revising a Japanese version and then translating it into English, we simultaneously reviewed both the English and Japanese versions and made revisions that reflected opinions from around the world. After the Code was released, it was translated into numerous languages under the initiative of local subsidiaries, and it is now published in 14 languages in addition to English and Japanese.

While The KOMATSU Way summarizes the values that have been handed down through the Company's history, the Worldwide Code of Business Conduct asserts Komatsu's determination to coexist with broad segments of society as a good corporate citizen.

Komatsu will continue to update its Worldwide Code of Business Conduct on a regular basis, to adapt to evolving rules and social requirements. We will follow these guidelines, together with the rules of the various countries and regions in which we operate, while sharing our ideals throughout the world.



New Life for Young Chileans

- Rehabilitation program and employment opportunities for the youth -



The Need for Rehabilitation Programs for Young Chilean People

The number of young people driven to crime through poverty and difficult domestic circumstances is a major social issue in Chile. Once young people are involved in a crime, they often commit another, and become trapped in a vicious circle of repeat offences. In fact, 67% of people arrested for robbery are repeat offenders, of which 30% have a criminal record of at least five incidences.

Recognizing this as a significant problem, the government of Chile has been operating a group training rehabilitation program that is designed to reintegrate into society those who have served a term in prison. However, the program has not been successful due to an inadequate budget.

This problem is not only a matter of concern for the government, but it also affects employment in private companies. That is why it has become an urgent matter for both the public and private sectors to jointly collaborate to enhance the effectiveness of rehabilitation programs.

ReinventaRSE, the Social Rehabilitation Program of Komatsu Cummins Chile Ltda.

Komatsu Cummins Chile Ltda. (KCC), a joint venture with Cummins Inc., developed a social rehabilitation program for young people called "ReinventaRSE," as one of its CSR activities, called "ReinventaRSE." "Reinventa" means "reinvention" in Spanish, and "RSE" is the equivalent of CSR.

In 2011, KCC accepted 10 young people from the northern districts of Santiago. These individuals became involved in crime when they were still minors and were put on parole or probation. The nine-month program offered by KCC allowed the young people to receive a high school diploma, get a car or truck driver's license, and subsequently provided them with technical training in fields related to KCC's business.

The rehabilitation program centers around five points.

The first is to offer education for a high school diploma. The second is to give due consideration to the fact that the these young peple grew up in a troubled domestic environment. The third is to provide technical training as a path to employment. The fourth is to lay the groundwork for human potential, and the fifth is to contribute to the young peoples' cultural, social, and intellectual growth.

The result was that 7 out of the 10 members who participated in the program were hired by KCC. Considering that the overall success rate of rehabilitation programs in Chile is 30%, this high success rate is noteworthy, and has received widespread acclaim.



Chilean young people finished "ReinventaRSE" program.

Another important aspect of "ReinventaRSE" is that the company's employees are participating. Each youth who participates in the program is assigned a mentor with the child rearing experience, who can be consulted about personal matters and who supports the individual by, for example, making visits to the family. These mentors are senior staff members, that can provide guidance for the youth. When KCC opened up in-house applications for ten mentors, a total of seventy applied. This reflects the strong interest of company employees and is an indication of the high potential for this program, which affords company employees an opportunity to participate directly in CSR activities.

KCC plans to continue this program in FY2012, and hopes to further increase the success rate.

Voice

Someone Cared about Me Lead to My Success



David Cornejo Mechanical Technician, Komatsu Chile S.A

At first, participation in the "Reinvent Yourself" program was difficult for me. Leaving the past behind and forgetting what I had done was not easy. But, as a result, I learned how to be a gentleman: acting with good will, looking at things from different points of view, and building friendly relationships, as well as learning many other social skills.

I think the best part of what this experience provides is meeting people who care about you. For example, my mentor is such a wonderful person that I think of him as a second father. In reality, I think of him as a true friend more than just a mentor. He taught me that I must be responsible and never give up, in order to provide a better future for my son and family.

From here on I would like to study and continue helping Komatsu in any way that I can. Komatsu was the reason I opened my eyes, not to look back on the past, but instead to study and succeed.

I would like to say to new members of the program, "don't give up" - put in honest effort, set goals, and promise yourself that "I'll see it through to the end."

voice

The Experience as the Mentor Gave Me an Experience of My Own Growth

> Christian Bussenius Mentor, Komatsu Chile S.A

I have worked at Komatsu for seventeen years and currently I am the mentor for Richard Tapia. When KCC started with the social reintegration project, a project leader asked me if I could guide and support one of the young people enrolled. I did not have any relevant experience, but I understood that this was an important role and I decided to accept the challenge.

The program was not an easy road to follow, but I was not alone. The first time I had a conflict with Richard, I realized that we came from separate worlds with completely different values and interests. But, I also learned that if I could accept his background, we would be able to understand one another. I believe he must have felt the same way that I did at the time. As time progressed, we got to know and trust each other more and more.

As a result of our work and efforts, Richard adopted the discipline that was required to comply with work schedules and dress codes, and he learned communication skills that at first were difficult for him. Once he completed his remedial courses, Richard joined the Accounting area, where he got along well with colleagues and also won the affection of his supervisors.

We both learned from each other, building trust and mutual respect. Currently Richard works in the Komatsu Reman Center and talks about wanting to attend college next year. I am very proud of him because he took advantage of the opportunity the company gave him, and I am sure he will succeed in his life project. I am grateful for the opportunity the company gave me to support Richard, because it was an experience of growth and learning for me as well.



Continuing Efforts to Respond to the Great East Japan Earthquake

Serving the needs of the disaster areas in close cooperation with local communities -



Support for Restoration after the Earthquake Disaster

In response to the Great East Japan Earthquake, which occurred on March 11, 2011, Komatsu immediately launched support activities for the disaster-affected areas by utilizing the assets of our core business.

One of the greatest challenges for the disaster areas has been the removal of scattered debris and the restoration of damaged roads. Komatsu gathered construction equipment and power generators used for such work from western Japan and later from the entire country, and began lending them for use in the disaster areas free of charge.

In April 2011, Komatsu established the Tohoku Operation Department in Sendai, where employees, with the cooperation of local governments, quickly evaluated the needs of the disaster areas and organized a maintenance service system, so that rented equipment would remain operable and employees could continue providing needed support. Reconstruction support valued at JPY 2,400 million is being provided by Komatsu, mostly in the form of free of charge rental equipment, forklifts, temporary housing, power generators and other supplies owned by the Komatsu Group. Construction equipment provided free of charge amounts to more than 250 vehicles, and approximately 670 employees

from the sales and support divisions provide support for the machinery at 55 sites in the three disaster-stricken prefectures of lwate, Miyagi, and Fukushima.



Members of the Tohoku Operation Department

Recovery of Local Communities

For residents of the disaster areas, finding a "space to pursue every day life" is a very important priority. To contribute to the recovery efforts of local communities, Komatsu construction personnel from all over Japan gathered at the disaster areas and quickly built temporary container houses. Approximately 850 cubicles (in 154 facilities) were provided for lease free of charge. These facilities are being used in local communities as schools, preschools, post offices and clinics. Komatsu will continue to help, in an effort to return peace-of-mind to the hearts of residents and smiles to the faces of children, both now and into the future.



President Noji and Kindergartners at the Opening Ceremony of a Kindergarten Donated to Fukushima Prefecture

Industrial Recovery: Transition from Restoration to Reconstruction

To support industrial recovery, Komatsu donated forklifts to the NPO "Signal of Hope". Approximately 60 forklifts are currently in service. In addition, we established the Komatsu Safety Training Center Miyagi Center, with Komatsu paying half of the tuition fees, to train operators of construction equipment, who are scarce in the disaster areas, and to provide working opportunities for disaster victims. There have already been more than 1,500 students who have taken courses and participated in recovery and reconstruction activities in the disaster areas.

Komatsu is also aiding students, who will play important roles in manufacturing in the future. Through the Institute of National Colleges of Technology, Japan, Komatsu is providing scholarships (named "Komatsu Scholarships") to students of national technical colleges in the Tohoku and Northern Kanto Regions, which were stricken by the disaster. Additionally, in collaboration with Rio Tinto, a mineralresource mining company and a Komatsu customer, we have established the "Rio Tinto-Komatsu Scholarship", and are providing scholarships to students at Tohoku University, a national university. We hope that these scholarship students can overcome the disaster of the earthquake and go on to productive academic careers.



The Komatsu Safety Training Center, Miyagi Center, Established in Natori City, Miyagi Prefecture

Overview of the Komatsu Scholarship

- Total of 200 million yen (continuing support with 20 million yen per year over a period of 10 years)
- Targets students at national technical colleges in the Tohoku and North Kanto regions affected by the disaster (including new entrants)

Overview of the Rio Tinto-Komatsu Scholarship

- Total of 400 million yen (continuing support over a period of 10 years)
 Note: 200 million yen contributed by Komatsu
- Targets undergraduate and graduate students of Tohoku University (including new entrants)

Provision and Development of Hazardarea Compliant Construction Equipment

Komatsu is supporting reconstruction efforts by harnessing our advanced technology, which we developed as a manufacturer of construction machinery.

At the Fukushima Daiichi Nuclear Power Station, Komatsu

sent radio-controlled construction equipment to remove rubble and debris. In addition, Komatsu's chemical-protective vehicle came into immediate use during investigations of the accident site. By making further improvements to this vehicle, we also developed the NBC (Nuclear, Bio, Chemical) reconnaissance vehicle, which was delivered in March 2012.

Regarding the critical issue of removing radioactive materials before beginning reconstruction, there are strong expectations for use of a computer-aided bulldozer that utilizes ICT. With this bulldozer, the depth of soil to be removed can be preset and the bulldozer can automatically excavate the surface to a fixed depth, swiftly and safely, removing radiation-contaminated soil with great precision without depending on the skills of the operator.

With the help of such technologies, Komatsu will continue to research and develop machinery capable of operating in hazardous areas.



An Automated Machine Control/Guidance Bulldozer, Intended for Decontamination of Radioactive Material.

Reconstruction has only just begun. We are still at the stage of clearing away debris, but there is no doubt that more construction equipment will be needed once work starts on restoring infrastructure such as embankments, roads, and railway tracks. The Komatsu Group will continue to mobilize our management resources to assist with the reconstruction of the disaster-stricken areas.

Voice

Acknowledgement of the Komatsu Scholarship - Producing students who play useful roles in society is imperative for reconstruction -Tatsuo Uchida Sendai National College of Technology (SNCT)



On March 11, 2011, the Tohoku region fell victim to a major earthquake and tsunami. At Sendai National College of Technology, one student enrolled at that time and one scheduled to enroll lost their lives, 34 students had family members or loved ones who were lost or unaccounted for, 54 had their homes totally destroyed, and the college buildings and grounds were devastated. What concerned me the most was that there would be students who would have to quit school for economic reasons. But, thanks to tuition waivers, as well as many charitable donations, scholarships, and other assistance, we were able to overcome these difficulties without a single student being forced to give up his or her studies. Among these different forms of support, the Komatsu Scholarship, which extends all the way to graduation, is the most comprehensive assistance for students affected by the disaster. Reading the essays written by the students, I learned that they were plagued by worries about whether it would be alright for them to continue their studies, whether they would be placing too big a burden on their parents, whether they would have regrets for causing trouble for their families, and whether they should quit college and get a job. But thanks to the scholarships, they were able to both support themselves and go to school. They also wrote that they wanted to make good-faith efforts toward reconstruction of the region and become useful members of their respective communities. Being part of an educational institution, I consider it to be my foremost responsibility to the reconstruction process to turn out good students. In this sense, as well, I would like to express my sincere gratitude for the Komatsu Scholarship on behalf of everyone on the faculty.

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Together with Business Partners - Initiative for CSR Procurement -

Business partners that supply materials, parts and components are important in helping to sustain Komatsu's manufacturing activities. Komatsu encourages our business partners to abide by social norms, while working towards CSR procurement.

Establishment of the CSR Procurement Guideline

In August 2011, Komatsu established our CSR Procurement Guideline. Before that, we not only supported environmental and workplace safety-related activities, consistent with our Green Procurement Guideline, but also promoted the concept of CSR among our business partners, by calling for compliance with legal and social codes that are compatible with Komatsu's Worldwide Code of Business Conductt.

In the future, Komatsu will encourage our business partners to be more aware of their social responsibilities, using the CSR Procurement Guideline to accelerate CSR activities throughout our supply chain.

>>> http://www.komatsu.com/CompanyInfo/csr/2012/3-6.html

CSR Procurement Guideline

Komatsu Criteria for Selecting and Evaluating Suppliers



Seeking the Cooperation of Our Business Partners through Awareness

We are working to convey the concepts of CSR procurement to our business partners.

The Komatsu Midori-kai group is an association of the company's major business partners in Japan. With 164 member companies, this group supplies roughly 75% of the products Komatsu purchases within Japan.

Komatsu holds various events to foster communication with Midori-kai group members, convening general conferences, roundtable discussions for managers, and informal New Year's business functions. Representatives from each Midori-kai group company attend these meetings, together with Komatsu's top management.

The CSR Procurement Guideline was initially presented at the general conference held in August 2011. Briefings have since been held at all Komatsu plants in Japan, resulting in the participation of 831 companies. Such educational activities have also begun at group companies. We would like to launch similar approaches for our Midori-kai groups overseas as well.

We have begun publishing "CSR Communication," a periodic journal that introduces specific examples of CSR case studies to our domestic business partners. Since May 2011, CSR Communication has been posted twice a month on a website dedicated to our business partners.



CSR Communication, issued twice a month to business partners within Japan. There were a total of 22 issues of CSR Communication in FY2011.

Komatsu China Midori-kai Group Formed

In September 2011, the Komatsu China Midorikai Group was formed by 59 Chinese business partners. Overseas Midori-kai Groups have already been formed in North America (37 companies) and Europe (51 companies). Joining these groups and the Japanese Midori-kai Group, the Chinese Midorikai Group was the fourth to be established.

As the pace of globalization and flexible manufacturing accelerates, relationships with our business partners will grow in importance, not only from the viewpoint of sustaining product quality and reliability, but also with regard to fulfillment of corporate responsibility within our supply chain.

With the present formation of the Komatsu

China Midori-kai Group, Komatsu is seeking to team up with all our regional Midori-kai groups, to approach CSR activities as part of a unified effort.



Scene at the Inaugural Meeting of the Komatsu China Midori-kai Group

Removing Anti-Personnel Landmines

Using its expertise in construction equipment technology, Komatsu is supporting demining work in areas plagued by antipersonnel landmines. Komatsu also participates in community development projects to revitalize landmine-affected areas.

Removing Anti-Personnel Landmines

Since 2008, Komatsu has been working jointly with the Japan Mine Action Service (JMAS), an incorporated non-profit organization (NPO), on a community-development project to demine and rebuild areas suffering damage from anti-personnel landmines in Cambodia and Angola.

Komatsu provides demining machinery, developed through our expertise in building construction equipment and Monozukuri (manufacturing) knowledge, at no charge.

After demining, we begin development of agricultural land

on the safely demined areas using our construction equipment. We also implement community rejuvenation and reconstruction projects for digging wells, building schools, and repairing and building roads and bridges.



Komatsu Demining Machine for Anti-personnel Mines

Turning a Minefield into a Safe Village

Beginning in FY2009, reconstruction of a 160-ha minefield in the Battambang Province, Cambodia was completed over the course of two years. As the land was safely demined and the infrastructure built, neighboring residents began settling in to Kiou Chea Montrei Village.

On June 15, a meeting was conducted in the schoolyard of the KOMATSU Primary School (officially known as the "KOMATSU Safety Village Primary School"), to hold a lottery for allocating housing lots to around 500 families. All the settlers' families gathered at the meeting to fairly receive shares of housing and land through the lottery.

One individual who built a home in the settlement remarked, "I am happy there are ponds and a school on this new land, but what is most pleasing to me is that there



Kiou·Chea Montrei Village now



are no landmines." His comment illustrates how eager people are to find safe land that is clear of landmines. At present, more than 350 homes have been built, turning a barren minefield into a safe, habitable village.

Starting with demining operations with such as these, Komatsu will carry on our work to rejuvenate and rebuild communities.



Destination of an Inspection Tour by the Parties of the 11th Conference of the Parties of the Ottawa Treaty (Cambodia)

The 11th Conference of the Parties of the Ottawa Treaty (Anti-Personnel Mine Ban Convention) hosted by the United Nations was held in Cambodia from November 28 to December 2, 2011, and Kiou · Chea Montrei Village, a project site implemented together with JMAS was chosen as a destination to be visited by conference attendees.

The tour took VIPs from around the world aboard a helicopter to give them a first-hand look at how the land, once a minefield, was transformed into a settlement. The tour offered participating parties an excellent opportunity to learn about our efforts, from demining to development of infrastructure and establishment of a safe village. Additionally, at the conference hall in the Cambodian capital of Phnom Penh, a booth was set up jointly with JMAS to present a video summary of our social contribution activities, from demining to regional rehabilitation.



World's VIPs Visiting the Reconstructed Kiou-Chea Montrei Village

Developing People

Growing with Society

Environmental Data by Manufacturing Facility in Japan

	Manufacturing facility Awazu Pla				wazu Plant (established in 1921) Kanazawa Plant (es				established in 2007) Osak			Osaka Plant (established in 1952)			
	Location			Komatsu, Isl	hikawa Prefe	cture		Kanazawa, Ishikawa Prefecture				Hirakata, Osaka Prefecture			
Overvie	Main products Site/Green Landscape (1,000 m ²) Toto					oulldozers, sn dium-sized wi ehicles, etc.	nall hydraulic heel loaders,	Ultra-large hydraulic excavators, large presses, medium presses				Large bulldozers, medium-sized and large hydraulic excavators, mobile crushers/recyclers/tub grinders (crushers, soil stabilizers, tub grinders, etc.)			
¥						/90			134	/25			591/	102	
	Number of employees 3				3,2	77			67	'1			2,8	02	
	Date of ISO14001 certification acquisitio				Septemb	er 1997			May 2	2007			July 1	997	
	*The work *Num	number of employees i king for Komatsu affiliates or ber of employees as of end	ncludes those the premises. of March 2012.												
				lte	m	Actua	l value	lte	m	Actual	value	Ite	n	Actua	al value
	Envir	ronmontal impact		Total CO2 er	nissions	40.8	337 t-CO2	Total CO2 er	missions	3.1	58 t-CO2	Total CO2 er	nissions	35.	919 t-CO2
	*Refe	er to the Data on Environ	imental Impact	NOx total an	nount	18.4	469 ka	NOx total ar	nount		— ka	NOx total an	nount	2.	465 ka
	the n	ulting from Business Activiti methods used to calculate a	es for details on mounts.	SOx total an	nount	4.0)83 kg	SOx total ar	nount		0 ka	SOx total an	nount	,	175 ka
	*Tota	I emissions of waste are	expressed as a	Total emission	ns of waste	1.5	R04 t	Total emissio	ns of waste	4	07 t	Total emission	is of waste	1	664 t
	valua	ables) and the amount dispo	osed.	Amount recy		1,0	301 t	Amount rec			07 t	Amount recy			653 t
	amo	unt recycled (including va	aluables) by the	Recycling ra	to	0		Recycling rs	ito.	1	00 %	Recycling ra	to		00001
~	amo *Total	unt generated (including val l emissions of BOD and CO	uables). D are calculated				110				70 1.00				0101
ſajo	by m amo	nultiplying the average conc unt of wastewater.	centration by the	COD emissio		3,	112 Kg	COD emissi	ono	2	/ 0 Ky	COD emissio			070 kg
r Pe				COD emissi	JIIS	1 101 (2073	COD emissi	ULIS	77.0	41 Kg	COD emission	JIIS	150	970 Kg
erforr				vvastewater	Actual	1,131,8 Conve	erted to calorie	Vvastewater	Actual	Conve	rted to calorie	Wastewater	Actual	Conv	erted to calorie
nanc				Ele etciette :	consumpt	ion equ	ivalents (GJ)		consumpt	ion equi	valents (GJ)	Fla atriaitu	consumpt	ion equ	uivalents (GJ)
Ø	Energy consumption			Electricity	0.0101	-0	100.007	Electricity	0,170 W	2	79,340	Electricity	00,9231	-0	0,470
			tor is calculated	Heavy Oll A	2,0121	.0	109,937	Heavy Oli A	0 K	2	0	Heavy OII A	217 1	.0	0,473
	in ke	eeping with Greenhouse	Gas Emissions	Kerosene	101	0	309	Kerosene	UK		0	Kerosene	100	0	3,112
	Man	Manual by the act on Promotion of Global			288 1		11,001		2 K		84		0 770 1		12,006
	Warr	ming Countermeasures.	Iown gas	1 500 1	NKM ³	70.010	Iown gas	0 N	km ³	0	Iown gas	3,7791	vkm ^o	158,340	
			LPG	1,586 t		79,619	LPG	5 t		251	LPG	68 t		3,399	
				Other			1,753	Other			0	Other			1,547
				Total			900,225	Total			79,881	Total			856,508
	Air	Item	Unit	Fac	ility	Regulated value	Actual value	Fac	ility	Regulated value	Actual value	Fac	ility	Regulated value	Actual value
		Nitrogen oxides (NOx)	ppm	Boiler		180	97	N/A		—	—	Boiler		150	25
			ppm	Diesel engin	e	950	910					Metal furnac	e	180	55
			ppm									Paint drying	furnace	230	10
			ppm												
		Sulfur oxides (SOx)	—	K-value regu	ulation	17.5	3.35					Regulation of total	emissions (Nm³/h)	1.573	0.002
		Soot and dust	g/m ³ N	Boiler		0.3	0.019	N/A		—		Boiler		0.03	0.028
			g/m ³ N	Diesel engin	e	0.1	0.029					Metal furnac	e	0.1	0.078
Col			g/m ³ N									Paint drying	furnace	0.1	0.009
npli			g/m ³ N												
anc	*Regu	ulated values are in accorda	nce with the Air P	ollution Control	Law and local	regulations.									
ë C	Wa	Itom	Regulated value	Regulated		Actual value	Э	Regulated		Actual value		Regulated		Actual valu	е
onc	stev	item	Pollution Control Law Unit	value	Maximum	Minimum	Average	value	Maximum	Minimum	Average	value	Maximum	Minimum	Average
litio	vate	pН	5.8-8.6	5.8-8.6	7.4	6.6	6.9	5.0-9.0	8.4	6.0	7.2	5.8-8.6	7.7	6.9	7.5
ns t	-	BOD (Biochemical oxygen demand)	160mg/l	80	5.7	0.5	1.9	80	3.6	3.6		25	14.0	0.8	4.0
∼		COD (Chemical Oxygen Demand)	160mg/l	80	5.1	0.5	1.9	80	26.0	4.4	10.9	25	11.0	4.1	6.4
lajo		Suspended solids (SS)	200mg/l	120	3.0	ND	1.2	120	7.4	1.0	4.9	80	3.0	ND	1.4
r Re		Mineral oils	5mg/ℓ	5	0.9	ND	0.5	5	ND	ND	_	3	ND	ND	ND
		0				ND	ND	3	ND	ND		3	ND	ND	ND
gul		Copper	3mg/l	3	ND		1 110	-							
gulatio		Zinc	3mg/l 2mg/l	3	ND 0.18	ND	0.08	2	0.15	0.15	_	2	ND	ND	ND
gulations		Zinc Nitrogen	3mg/l 2mg/l 120mg/l	3 2 120	ND 0.18 3.8	ND 2.1	0.08	2	0.15	0.15 45.0		2 120	ND 26.0	ND 3.7	ND 12.7
gulations		Zinc Nitrogen Phosphorus	3mg/l 2mg/l 120mg/l 16mg/l	3 2 120 16	ND 0.18 3.8 0.18	ND 2.1 0.01	0.08 3.1 0.08	2 120 16	0.15 45.0 8.8	0.15 45.0 8.8		2 120 16	ND 26.0 3.6	ND 3.7 0.2	ND 12.7 1.3
gulations		Zinc Nitrogen Phosphorus Cadmium	3mg/l 2mg/l 120mg/l 16mg/l 0.1mg/l	3 2 120 16 0.1	ND 0.18 3.8 0.18 ND	ND 2.1 0.01 ND	0.08 3.1 0.08 ND	2 120 16 0.1	0.15 45.0 8.8 ND	0.15 45.0 8.8 ND		2 120 16 0.01	ND 26.0 3.6 ND	ND 3.7 0.2 ND	ND 12.7 1.3 ND
gulations		Zinc Nitrogen Phosphorus Cadmium Lead	3mg/l 2mg/l 120mg/l 16mg/l 0.1mg/l 0.1mg/l	3 2 120 16 0.1 0.1	ND 0.18 3.8 0.18 ND ND	ND 2.1 0.01 ND	0.08 3.1 0.08 ND ND	2 120 16 0.1 0.1	0.15 45.0 8.8 ND ND	0.15 45.0 8.8 ND ND		2 120 16 0.01 0.01	ND 26.0 3.6 ND ND	ND 3.7 0.2 ND ND	ND 12.7 1.3 ND ND
gulations		Zinc Nitrogen Phosphorus Cadmium Lead Chromium (VI)	3mg/l 2mg/l 120mg/l 16mg/l 0.1mg/l 0.1mg/l 0.5mg/l	3 2 120 16 0.1 0.1 0.5	ND 0.18 3.8 0.18 ND ND ND ND	ND 2.1 0.01 ND ND ND	0.08 3.1 0.08 ND ND ND	2 120 16 0.1 0.1 0.5	0.15 45.0 8.8 ND ND ND	0.15 45.0 8.8 ND ND ND		2 120 16 0.01 0.01 0.05	ND 26.0 3.6 ND ND ND	ND 3.7 0.2 ND ND ND	ND 12.7 1.3 ND ND ND
gulations		Zinc Nitrogen Phosphorus Cadmium Lead Chromium (VI) Trichloroethvlene	3mg/l 2mg/l 120mg/l 16mg/l 0.1mg/l 0.1mg/l 0.5mg/l 0.3ma/l	3 2 120 16 0.1 0.1 0.5 0.3	ND 0.18 3.8 0.18 ND ND ND ND 0.002	ND 2.1 0.01 ND ND ND ND ND ND	0.08 3.1 0.08 ND ND ND 0.002	2 120 16 0.1 0.1 0.5 0.3	0.15 45.0 8.8 ND ND ND ND	0.15 45.0 8.8 ND ND ND ND		2 120 16 0.01 0.01 0.05 0.03	ND 26.0 3.6 ND ND ND ND ND ND	ND 3.7 0.2 ND ND ND ND ND	ND 12.7 1.3 ND ND ND ND ND
gulations		Zinc Nitrogen Phosphorus Cadmium Lead Chromium (VI) Trichloroethylene Tetrachloroethylene	3mg/l 2mg/l 120mg/l 16mg/l 0.1mg/l 0.1mg/l 0.5mg/l 0.3mg/l 0.1mn/l	3 2 120 16 0.1 0.5 0.3 0.1	ND 0.18 3.8 0.18 ND ND ND ND ND 0.002	ND 2.1 0.01 ND ND ND ND ND ND ND ND	0.08 3.1 0.08 MD ND ND ND 0.002	2 120 16 0.1 0.5 0.3 0.1	0.15 45.0 8.8 ND ND ND ND	0.15 45.0 8.8 ND ND ND ND		2 120 16 0.01 0.05 0.03 0.01	ND 26.0 3.6 ND ND ND ND ND ND	ND 3.7 0.2 ND ND ND ND ND ND	ND 12.7 1.3 ND ND ND ND ND ND

1,1,1-trichloroethane 3mg/l *Regulated values are in accordance with the Water Pollution Control Law and local

The Water Pollution Control Law and local regulations. "ND ('not detected'') indicates a value below the lower limit of detection. "ND is considered to be the lower limit of detection when calculating the average. "Other i them are confirmed to be below the regulated value.

*Data for the Awazu Plant include data for the Komatsu NTC Ltd (KM Division).

ND

ND

ND

З

*Data for the Kanazawa Plant include data for the Kanazawa Dai-ichi, Dai-ni and the Kawakita Plant.

ND

ND

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*Data for the Osaka Plant include data for the Rokko Plant.

ND

ND

ND

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Ibaraki Plant (established in 2007)	Oyama Plant (established in 1962)	Koriyama Plant (established in 1995)	Shonan Plant (established in 1966)	
Hitachinaka, Ibaraki Prefecture	Oyama, Tochigi Prefecture	Koriyama, Fukushima Prefecture	Hiratsuka, Kanagawa Prefecture	
Large wheel loaders, dump trucks	Engines for construction/industrial machinery, diesel generators, hydraulic equipment, axle, excimer lasers, etc.	Hydraulic cylinders, swivel joints, gear pumps	Control equipment for construction and mining equipment, hybrid components Thermoelectric modules, temperature control equipment, etc.	
251/50	571/118	297/62	68/19	
884	3,433	465	993	
May 2007	May 1997	July 2002	March 2000	

Ite	m	A	Actual value	lte	m		Actual value	lte	m	A	Actual value	Ite	m	A	Actual value
Total CO2 er	missions		4,080 t-CO2	Total CO2 e	missions		62,865 t-CO2	Total CO2 e	missions		12,994 t-CO2	Total CO2 er	missions		2,848 t-CO2
NOx total ar	mount		— kg	NOx total a	mount		52,773 kg	NOx total ar	mount		95,059 kg	NOx total ar	mount		— kg
SOx total an	nount		3 kg	SOx total ar	nount		319 kg	SOx total ar	mount		2,732 kg	SOx total ar	nount		0 kg
Total emissio	ns of waste		364 t	Total emissio	ns of waste		3,383 t	Total emissio	ins of waste		976 t	Total emissio	ns of waste		128 t
Amount rec	ycled		364 t	Amount rec	ycled		3,383 t	Amount rec	ycled		976 t	Amount rec	ycled		128 t
Recycling ra	ite		100 %	Recycling ra	ate		100 %	Recycling ra	ate		100 %	Recycling ra	ate		100 %
BOD emissi	ons		10,055 kg	BOD emissi	ons		3,005 kg	BOD emissi	ons		130 kg	BOD emissi	ons		3,095 kg
COD emissi	ons		— kg	COD emissi	ons		6,499 kg	COD emissi	ions		217 kg	COD emissi	ons		— kg
Wastewater			20,417 m ³	Wastewater			568,800 m ³	Wastewater			18,537 m ³	Wastewater			25,582 m ³
ltem	Actual consumpt	tion	Converted to calorie equivalents (GJ)	Item	Actua consump	l tion	Converted to calorie equivalents (GJ)	Item	Actua consump	l otion	Converted to calorie equivalents (GJ)	Item	Item Actual consumption		Converted to calorie equivalents (GJ)
Electricity	8,850 N	٧Wh	86,523	Electricity	80,457	MWh	781,040	Electricity	9,273	MWh	89,649	Electricity	7,094 1	Wh	70,727
Heavy oil A	01	<l< td=""><td>0</td><td>Heavy oil A</td><td>251</td><td>kl</td><td>9,806</td><td>Heavy oil A</td><td>3,186</td><td>kl</td><td>124,573</td><td>Heavy oil A</td><td>01</td><td><l< td=""><td>0</td></l<></td></l<>	0	Heavy oil A	251	kl	9,806	Heavy oil A	3,186	kl	124,573	Heavy oil A	01	<l< td=""><td>0</td></l<>	0
Kerosene	2 k	<l< td=""><td>91</td><td>Kerosene</td><td>2,913</td><td>κl</td><td>106,921</td><td>Kerosene</td><td>0</td><td>kl</td><td>0</td><td>Kerosene</td><td>01</td><td><l< td=""><td>0</td></l<></td></l<>	91	Kerosene	2,913	κl	106,921	Kerosene	0	kl	0	Kerosene	01	<l< td=""><td>0</td></l<>	0
Light oil	206 k	<l< td=""><td>7,858</td><td>Light oil</td><td>3,134</td><td>kl</td><td>119,736</td><td>Light oil</td><td>0</td><td>kl</td><td>0</td><td>Light oil</td><td>33 I</td><td><l< td=""><td>1,261</td></l<></td></l<>	7,858	Light oil	3,134	kl	119,736	Light oil	0	kl	0	Light oil	33 I	<l< td=""><td>1,261</td></l<>	1,261
Town gas	10	Vkm ³	0	Town gas	7,826	Nkm ³	327,928	Town gas	0	Nkm ³	0	Town gas	191	Nkm ³	779
LPG	46 t		2,289	LPG	37	t	1,870	LPG	266	t	13,368	LPG	0 t		0
Other			0	Other			2,017	Other			0	Other			0
Total			96,761	Total			1,349,319	Total			227,589	Total			72,767

Facility	Regulated value	Actual value	Facility	Regulated value	Actual value	Facility	Regulated value	Actual value	Facility	Regulated value	Actual value
N/A	—		Diesel engine	950	750	Cogeneration engine	760	670	N/A	—	—
			Gas turbine	70	20						
			K-value regulation	7.0	0.52	K-value regulation	11.5	0.33			
N/A	—		Diesel engine	0.1	0.024	Tempering (electric) furnace	0.2	less than 0.003	N/A	—	—
						Baking (electric) furnace	0.2	less than 0.003			
						Cogeneration engine	0.2	0.075			

Regulated		Actual value	2	Regulated		Actual value	1	Regulated		Actual value	•	Regulated		Actual value	•
value	Maximum	Minimum	Average												
—	—	—	—	5.8-8.6	7.5	6.9	7.2	5.8-8.6	7.3	6.8	7.2	5-9	7.9	6.0	7.3
600	590	400	493	25	8.5	1.2	5.3	20	17.0	2.2	7.0	600	190	2.0	58.0
—		—	—	25	17.7	6.2	11.4	40	17.0	3.5	11.7	—	—	—	—
—	—	—	—	50	12.4	2.4	7.8	50	7.4	1.0	3.7	600	270	ND	41.0
	—	—	—	5	1.1	ND	0.6	1	ND	ND	ND	5	ND	ND	ND
_	-	_	_	3	ND	ND	ND	2	ND	ND	—	3	ND	ND	ND
—	-	_	_	2	0.29	ND	0.09	2	ND	ND	—	2	0.18	0.02	0.08
_	_	_	_	20	9.7	3.3	6.0	120	14.0	14.0	—		—	—	—
—	-	_	_	2	0.6	0.2	0.4	16	2.3	2.3	—	—	—	—	—
—	_	_	_	0.1	ND	ND	ND	0.1	ND	ND	—	0.1	ND	ND	ND
_	_	_	_	0.1	ND	ND	ND	0.1	ND	ND	ND	0.1	ND	ND	ND
—	-	_	_	0.1	ND	ND	ND	0.1	ND	ND	ND	0.5	ND	ND	ND
_	_	_	_	0.3	ND	ND	ND	0.3	ND	ND	—	0.3	ND	ND	ND
_	_	_	_	0.1	ND	ND	ND	0.1	ND	ND	_	0.1	ND	ND	ND
—	-	_	_	—	—	—	—	0.2	ND	ND	—	0.2	ND	ND	ND
_	_	_	_	3	ND	ND	ND	3	ND	ND		3	ND	ND	ND

*Data for the Oyama Plant include data for the Komatsu Cummins Engine Co., Ltd., the Industrial Power Alliance Ltd., and the GIGAPHOTON, Inc. *Data for the Shonan Plant include data for KELK Ltd.

Environmental Data by Manufacturing Facility in Japan

	Manufacturing facility	Tochigi Plant (established in 1968)	Research Division (established in 1985)	Komatsu Castex Ltd. (established in 1952)
	Location	Oyama, Tochigi Prefecture	Hiratsuka, Kanagawa Prefecture	Himi, Toyama Prefecture
Overv	Main products	Forklift trucks, mini wheel loaders, mini wheel loaders	R&D on business fields of the Komatsu Group	Iron castings, steel castings, molds for casting, etc.
iew	Site/Green Landscape (1,000 m ²)	235/28	195/124	433/104
	Number of employees	1,015	214	1,192
	Date of ISO14001 certification acquisition	February 1998	May 2008	January 2000

*The number of employees includes those working for Komatsu affiliates on the premises. *Number of employees as of end of March 2012.

		lte	m		Actual value	Ite	m		Actual value	lte	m		Actual value
	Environmental impact	Total CO ₂ e	missions		4,776 t-CO2	Total CO2 er	missions		1,741 t-CO ₂	Total CO ₂ e	missions		84,590 t-CO ₂
	*Refer to the Data on Environmental Impact Besulting from Business Activities for details on	NOx total a	mount		2,784 kg	NOx total ar	nount		322 kg	NOx total a	mount		9,881 kg
	the methods used to calculate amounts.	SOx total a	nount		1,541 kg	SOx total ar	nount		90 kg	SOx total ar	nount		1,527 kg
	composite of the amount recycled (excluding	Total emissic	ns of waste		542 t	Total emissio	ns of waste		90 t	Total emissic	ns of waste		8,415 t
	*Recycling rate is calculated by dividing the	Amount rec	ycled		527 t	Amount rec	ycled		90 t	Amount rec	ycled		8,369 t
	amount recycled (including valuables) by the amount generated (including valuables).	Recycling ra	ate		98.7 %	Recycling ra	ite		99.4 %	Recycling ra	ate		99.9 %
Ma	*Total emissions of BOD and COD are calculated by multiplying the average concentration by the	BOD emiss	ons		493 kg	BOD emissi	ons		6 kg	BOD emissi	ions		2,789 kg
jor	amount of wastewater.	COD emiss	ons		582 kg	COD emissi	ons		13 kg	COD emissi	ions		2,488 kg
Perf		Wastewater			96,923 m ³	Wastewater			4,266 m ³	Wastewater		1	,211,399 m ³
orma		Item	Item Actua consump		Converted to calorie equivalents (GJ)	Item	Actual consumpt	tion	Converted to calorie equivalents (GJ)	Item	Actual consumpt	tion	Converted to calorie equivalents (GJ)
lce		Electricity	7,272	MWh	70,646	Electricity	3,114	MWh	30,096	Electricity	162,6641	MWh	1,577,800
	Energy consumption	Heavy oil A	556	kℓ	21,752	Heavy oil A	64	kl	2,498	Heavy oil A	2,540	ĸl	99,326
	*The heat energy conversion factor is calculated	Kerosene	0	kl	0	Kerosene	110	kl	4,040	Kerosene	1,398	κl	51,316
	Calculation - Reporting Manual. Reporting	Light oil	19	kl	720	Light oil	28	kl	1,063	Light oil	347	κl	13,241
	Warming Countermeasures.	Town gas	0	Nkm ³	0	Town gas	0	Nkm ³	0	Town gas	10	Nkm ³	0
		LPG	133	t	6,683	LPG	8	t	409	LPG	3,6161	t	181,528
		Other			410	Other			14	Other			97
		Total			100,210	Total			38,122	Total			1,923,309

	Air	Item	Unit	Facility	Regulated value	Actual value	Facility	Regulated value	Actual value	Facility	Regulated value	Actual value	
		Nitrogen oxides (NOx)	ppm	Small boilers*	(260)	67	Service generator	303	100	Annealing furnace	200	97	
			ppm				Cold/hot water generator	390	33	Annealing furnace (small)	180	36	
			ppm							Calciners	220	less than 7	
			ppm										
	Sulfur oxides (SOx) —			K-value regulation	7.0	0.18	K-value regulation	11.5	0.2	K-value regulation	17.5	0.99	
Soot and dust g/m ³ N Small boilers* (0.5) 0.005 Service generator 0.1 0.009 Annealing furnace 0.24										0.25	0.01 or less		
	g/m³N Cold/hot water generator 0.2 0.006 Annealing furnace (small) 0.2 0.01 or les											0.01 or less	
ဂ္ဂ	g/m ³ N 2.15 0.01 or less												
am	g/m³N Arch furnace 0.1 0.01 or less												
liance	*Regulated values are in accordance with the Air *Regulated values of NOx, soot and dust are in accordance Pollution Control Law and local regulations. with self-regulatory measures, because these boilers are small.												

5	Wa	Itom	Regulated value	Regulated		Actual value		Regulated		Actual value		Regulated		Actual value	
2	stev	literii	Pollution Control Law Unit	value	Maximum	Minimum	Average	value	Maximum	Minimum	Average	value	Maximum	Minimum	Average
	/atei	pН	5.8-8.6	5.8-8.6	7.2	7.0	7.1	5.8-8.6	8.4	7.2	7.5	5.8-8.6	8.4	7.1	7.7
5	<u> </u>	BOD (Biochemical oxygen demand)	160mg/l	25	16.0	1.8	5.1	10	2.0	1.0	1.3	25	6.1	0.7	2.4
	[COD (Chemical Oxygen Demand)	160mg/l	25	18.7	2.0	6.0	25	5.0	2.0	4.0	160	4.0	1.8	2.9
2	[Suspended solids (SS)	200mg/l	50	10.4	2.8	5.3	65	7.0	ND	3.3	90	18.0	ND	5.4
	ĺ	Mineral oils	5mg/l	5	0.7	ND	0.5	5	1.0	1.0	1.0	5	0.6	ND	0.5
$\frac{1}{2}$	[Copper	3mg/l	3	ND	ND	ND	1	ND	ND	ND	1	ND	ND	ND
	[Zinc	2mg/l	2	0.05	ND	0.05	1	ND	ND	ND	2	ND	ND	ND
´	ĺ	Nitrogen	120mg/l	20	5.5	2.1	3.8	120	—	—	—	120	9.9	1.5	5.3
	[Phosphorus	16mg/l	2	0.59	0.14	0.37	16				16	0.91	ND	0.46
	[Cadmium	0.1mg/l	0.1	ND	ND	ND	0.1	0.01	ND	0.01	0.1	ND	ND	ND
	ĺ	Lead	0.1mg/l	0.1	ND	ND	ND	0.1	0.05	0.05	0.05	0.1	ND	ND	ND
	[Chromium (VI)	0.5mg/ℓ	0.1	ND	ND	ND	0.5	0.05	0.05	0.05	0.5	ND	ND	ND
	[Trichloroethylene	0.3mg/l	0.3	ND	ND	ND	0.3	ND	ND	ND	0.3	ND	ND	ND
	ĺ	Tetrachloroethylene	0.1mg/l	0.1	ND	ND	ND	0.1	0.002	0.002	0.002	0.1	ND	ND	ND
	[Dichloromethane	0.2mg/ℓ	0.2	ND	ND	ND	0.2	ND	ND	ND	0.2	ND	ND	ND
		1,1,1-trichloroethane	3mg/l	3	ND	ND	ND	3	0.002	0.002	0.002	3	ND	ND	ND

Regulated values are in accordance with the Water Pollution Control Law and local regulations. "ND ('not detected') indicates a value below the lower limit of detection. "ND is considered to be the lower limit of detection when calculating the average. "Other items are confirmed to be below the regulated value.

	Manufacturing facility	Komatsu NTC Ltd. (established in 1945)	Komatsu Cabtec Co., Ltd. (established in 1918)	Komatsu House Ltd. (established in 1971)
	Location	Nanto, Toyama Prefecture	Ryuou-cho, Gamou, Shiga Prefecture	Shinshiro, Aichi Prefecture
Over	Main products	Machine tools, laser process machines, wire saws	Cabs for construction equipment	Prefabricated structures for businesses
Viev	Site/Green Landscape (1,000 m ²)	155/28	41/9	31/1
<	Number of employees	930	372	40
	Date of ISO14001 certification acquisition	June 1999	December 2007	March 2002

*The number of employees includes those working for Komatsu affiliates on the premises. *Number of employees as of end of March 2012.

		lte	m		Actual value	Ite	m		Actual value	Ite	m		Actual value
	Environmental impact	Total CO2 e	missions		8,394 t-CO2	Total CO2 e	missions		3,841 t-CO2	Total CO2 er	missions		1,082 t-CO2
	*Refer to the Data on Environmental Impact Besulting from Business Activities for details on	NOx total a	mount		— kg	NOx total ar	nount		— kg	NOx total ar	nount		379 kg
	the methods used to calculate amounts.	SOx total a	nount		0 kg	SOx total ar	nount		4 kg	SOx total ar	nount		117 kg
	composite of the amount recycled (excluding	Total emissic	ns of waste		1,709 t	Total emissio	ns of waste		402 t	Total emissio	ns of waste		69 t
	*Recycling rate is calculated by dividing the	Amount rec	ycled		1,656 t	Amount rec	ycled		329 t	Amount rec	ycled		69 t
	amount recycled (including valuables) by the amount generated (including valuables).	Recycling ra	ate		98.2 %	Recycling ra	ite		98.8 %	Recycling ra	ite		100 %
Ma	*Total emissions of BOD and COD are calculated by multiplying the average concentration by the	BOD emiss	ons		1,732 kg	BOD emissi	ons		225 kg	BOD emissi	ons		83 kg
ijor	amount of wastewater.	COD emiss	ons		— kg	COD emissi	ons		298 kg	COD emissi	ons		119 kg
Per		Wastewater			1,776,527 m ³	Wastewater			100,172 m ³	Wastewater			9,316 m ³
oma		Item	Actual consumpt	tion	Converted to calorie equivalents (GJ)	Item	Actual consump	tion	Converted to calorie equivalents (GJ)	Item	Actual consumpt	tion	Converted to calorie equivalents (GJ)
nce		Electricity	21,527	MWh	210,889	Electricity	7,588	MWh	74,092	Electricity	784	MWh	7,821
	Energy consumption	Heavy oil A	0	kl	0	Heavy oil A	0	kl	0	Heavy oil A	83	κl	3,245
	*The heat energy conversion factor is calculated	Kerosene	0	κl	16	Kerosene	15	kl	551	Kerosene	01	κl	0
	Calculation - Reporting Manual. Reporting	Light oil	7	kl	284	Light oil	49	kl	1,853	Light oil	12	ĸl	475
	Manual by the act on Promotion of Global Warming Countermeasures.	Town gas	0	Nkm ³	0	Town gas	0	Nkm ³	0	Town gas	01	Nkm ³	0
		LPG	35	t	1,737	LPG	254	t	12,771	LPG	175 1	t	8,764
		Other			50	Other			0	Other			0
		Total			212,976	Total			89,266	Total			20,306

	Air	Item	Unit	Facility	Regulated value	Actual value	Facility	Regulated value	Actual value	Facility	Regulated value	Actual value
		Nitrogen oxides (NOx)	ppm	N/A	_	_	N/A	—		Boiler	250	72
l or		Sulfur oxides (SOx)								K-value regulation	17.5	0.59
npli		Soot and dust	g/m ³ N	N/A	—		N/A	—		Boiler	0.3	0.002
ano												

e C	Wa	Itom	Regulated value	Regulated		Actual value	1	Regulated		Actual value		Regulated		Actual value	
ond	stev	Item	Pollution Control Law Unit	value	Maximum	Minimum	Average	value	Maximum	Minimum	Average	value	Maximum	Minimum	Average
litio	vate	рН	5.8-8.6	5.8-8.6	7.0	6.0	6.6	5.8-8.6	7.7	7.1	7.4	5.8-8.6	8.6	6.0	6.8
ns t	~	BOD (Biochemical oxygen demand)	160mg/l	160	4.3	ND	1.0	20	4.0	ND	2.3	160	43.0	0.5	8.9
Š		COD (Chemical Oxygen Demand)	160mg/l	—		—		20	5.5	1.6	3.0	160	25.0	5.1	12.8
ajor		Suspended solids (SS)	200mg/l	200	6.0	ND	1.9	20	9.8	ND	2.1	200	11.0	1.0	3.1
Re		Mineral oils	5mg/l	5	ND	ND	ND	—	—	—		5	ND	ND	ND
gula		Copper	3mg/l	—		—		0.1	0.02	ND	0.02	—	—		—
atior		Zinc	2mg/l	—				0.5	0.28	0.03	0.07	—	—	—	—
ึ่ง		Nitrogen	120mg/l	—				8	5.4	1.2	2.6	120	46.0	0.7	17.3
		Phosphorus	16mg/ℓ					0.6	ND	ND	ND	16	5.7	0.3	1.8
		Lead	0.1mg/l			_		0.03	ND	ND	ND		—		

*Regulated values are in accordance with the Water Pollution Control Law and local regulations. *ND ('hot detected') indicates a value below the lower limit of detection. *ND is considered to be the lower limit of detection when calculating the average. *Other items are confirmed to be below the regulated value.

*Data for Komatsu NTC Ltd. include data for the Toyama plant and the Fukuno Plant.

	Manufacturing facility	Komatsu Construction Equipment Sales and Service Japan Ltd. (established in March 1967)	Komatsu Rental Ltd. (established in Oct. 2006)	Komatsu Forklift Japan Ltd. (established in Jan. 1973)
0	Location	Sagamihara, Kanagawa Prefecture (Head office)	Yokohama, Kanagawa Prefecture (Head office)	Shinagawa, Tokyo metropolitan (Head office)
Ver	Activities	Sales and service for construction machinery	Rentals for construction machinery, engineering works construction machine apparatuses, and vehicles	Sales and service for forklift
⊻ie	Number of bases	109 sites	154 sites	138 sites
≤	Number of employees	1,909	960	1,745
	Date of ISO14001 certification acquisition	—	_	

				Y									
	Environmental impact	Ite	m	A	Actual value	Iter	n	A	Actual value	Item		Actual value	
	*Total waste emissions are equal to the amount	Total CO2 er	nissions		4,673 t-CO2	Total CO2 en	nissions		2,415 t-CO2	Total CO2 em	issions		3,038 t-CO2
	valuables)	Total emissior	ns of waste		4,317 t	Total emission	ns of waste		1,998 t	Total emission	s of waste		4,854 t
	*Recycling rate is calculated by dividing the amount recycled by the amount generated	Amount recycled			3,372 t	Amount recycled		1,712 t		Amount recycled		4,374 t	
Maj	(including valuables.)	Recycling ra	te		78.1 %	Recycling rat	te		85.7 %	Recycling rate	e		90.1 %
jor Pe		Item	Actua consum	al ption	Converted to calorie equivalents (GJ)	Item	Actua consump	al otion	Converted to calorie equivalents (GJ)	Item	Actua consump	al otion	Converted to calorie equivalents (GJ)
rfor	Energy concumption	Electricity	8,458	MWh	84,331	Electricity	4,766	MWh	47,515	Electricity	5,844	MWh	58,264
ma	*The heat energy conversion factor is calculated	Heavy oil A	51	kl	1,982	Heavy oil A	0	kℓ	0	Heavy oil A	0	kℓ	0
nce	in keeping with Greenhouse Gas Emissions	Kerosene	384	kl	14,089	Kerosene	109	kl	4,004	Kerosene	236	kℓ	8,676
Û	Manual by the act on Promotion of Global	Light oil	52	kl	1,986	Light oil	101	kl	3,866	Light oil	4	kℓ	153
	Warming Countermeasures.	LPG	44	t	2,214	LPG	9	t	467	LPG	58	t	2,922
		Town gas, et al.			1,205	Town gas, et al.			298	Town gas, et al.			342
		Total			105.807	Total			56,150	Total			70.357

Environmental Data by Manufacturing Facility outside Japan

		The America	s				Europe		
Q		СМО	PMO	NMO	KDB	Hensley	KUK	KOHAG	KMG
ervie	Manufacturing facilities	Komatsu America Cor	p.		Komatsu do Brasil	Hensley Industries,	Kamatau IIK I td	Komatsu Hanomag	Komatsu Mining
×		Chattanooga Manufacturing Operation	Peoria Manufacturing Operation	Newberry Manufacturing Operation	Ltda.	Inc.	Komaisu OK Liu.	GmbH	Germany GmbH
	Location	Tennessee, U.S.A.	Illinois, U.S.A.	South Carolina, U.S.A.	São Paulo, Brazil	Texas, U.S.A.	Birtley, United Kingdom	Hannover, Germany	Düsseldorf, Germany
	Main products	Hydraulic excava- tors, motor graders	Large wheel loaders, large dump trucks	Utility equipment (small construction equipment)	Hydraulic excava- tors, bulldozers	Buckets, teeth and edges	Hydraulic excavators	Wheel loaders, compactors	Ultra-large hydraulic excavators
	Number of employees	420	872	189	834	561	402	449	851
E.	Electricity (MWh)	9,719	18,699	3,202	30,482	42,581	5,770	5,814	7,841
ərgy	Heavy oil, light oil, et al. (kl)		150	107	502	126	372	2	49
con	Natural gas(thousand m ³)	1,099	1,958	7		4	730	894	1,102
sumpti	LPG, et al. (t)		46 (LPG)	488 (LPG)	532 (LPG)	105 (LPG)	—	2,338* (District heating)	5 (LPG)
n	Total energy consumption (GJ)	138,547	268,665	60,571	349,919	434,768	98,080	93,305	119,740
	CO2 (t- CO2)	7,650	14,952	3,560	5,478	24,928	5,257	6,049	5,325
Wat	er consumption (t)	16,104	33,758	2,567	27,758	47,100	17,664	7,345	8,573
Tota	emissions of waste (t)	1,609	3,352	423	9,147	28,619	794	1,229	5,773
Date o	f ISO14001 certification acquisition	April 1998	March 2002	March 2004	January 2002	November 2009	December 1998	September 2000	July 2002
		_		~		· · ·	·	*Unit:MWh	

		Europe				Asia			
Q		KUE	KFAB	KMR	STAVMEK	KI	KUI	BKC	BKI
erview	Manufacturing facilities	Komatsu Utility Europe S.p.A.	Komatsu Forest AB	Komatsu Manufac- turing Rus, LLC	Stavmek s.r.o.	PT Komatsu Indonesia	PT Komatsu Undercarriage Indonesia	Bangkok Komatsu Co., Ltd.	Bangkok Komatsu Industries Co., Ltd.
	Location	Este (PD), Italy	Umeå, Sweden	Yaroslavl, Russia	Czech Republic	Jakarta, Indonesia	West Java, Indonesia	Chonburi, Thailand	Chonburi, Thailand
	Main products	Utility equipment (small construction equipment)	Forestry equipment	Hydraulic excava- tors, Forklift trucks	Manufacture of sheet metal parts for construction equipment	Hydraulic excava- tors, bulldozers, wheel loaders	Components for construc- tion equipment, crawler type for construction machinery, pins	Hydraulic excavators	Forklift trucks, Castiron parts for construction machinery
	Number of employees	360	426	233	216	1,661	1,161	680	349
	Electricity (MWh)	3,400	2,533	3,058	3,622	45,412	56,246	9,903	35,862
Ē	Heavy oil, light oil, et al. (kl)			34		162	1,664	849	60
ergy	Natural gas(thousand m ³)	587		1,478	337	2,704			
consu	LPG, et al. (t)		2,175* (District heating)			247 (LPG)	306 (LPG)	38 (LPG)	261 (LPG)
npti	Total energy consumption (GJ)	56,442	28,604	92,188	48,109	581,454	640,896	133,436	373,040
on	CO2 (t- CO2)	2,668	232	4,033	2,572	39,237	45,682	7,658	20,136
Wat	er consumption (t)	12,388	4,937	8,100	23,378	121,481	102,285	54,909	67,334
Total	emissions of waste (t)	1,175	400	914	512	8,332	7,695	439	7,495
Date of	ISO14001 certification acquisition	November 2001	October 2003		April 2012	June 2000	October 2008	September 2001	December 2009
			*1 L=:+. N 4\ A //-	х	·		* la alcala alata faa KOEL	^	A

Asia

ð		LTK	KIPL	KSC	KCCM	KCF	KSD	KUCC
erview	Manufacturing facilities	L&T-Komatsu Limited	Komatsu India Pvt. Ltd.	Komatsu Shantui Construction Machinery Co., Ltd.	Komatsu (Changzhou) Construction Machinery Corp.	Komatsu (Chang- zhou) Foundry Corp.	Komatsu (Shandong) Construction Machinery Corp.	Komatsu Undercar- riage China Corp.
	Location	Bangalore, India	Chennai, India	Shandong, China	Jiangsu, China	Jiangsu, China	Shandong, China	Shandong, China
	Main products	Hydraulic excavators	Dump trucks	Hydraulic excavators	Wheel loaders, hydraulic excavators, motor graders	Iron castings and foundry molds for construction and mining equipment	Mini construction equip- ment, forklift trucks, hydraulic equipment and mining equipment	Crawler type for construction machinery
	Number of employees	930	205	1,299	609	291	896	330
	Electricity (MWh)	7,728	687	10,405	4,734	41,607	26,700	24,978
Ēח	Heavy oil, light oil, et al. (kl)	42	195	131	1,498	85	357	55
ərgy	Natural gas (thousand m ³)		—	240			2,294	923
consu	LPG, et al. (t)	114 (LPG)	—	23,395 (Steam)	24 (LPG, LNG)	228 (Coal, LPG, LNG)	11,626 (LPG, Steam)	—
mpti	Total energy consumption (GJ)	84,399	14,378	216,511	106,074	428,585	423,836	288,916
g	CO ₂ (t- CO ₂)	7,587	1,150	11,372	7,742	33,562	27,952	21,714
Wate	er consumption (t)	75,790	21,352	147,113	100,710	113,212	130,948	85,518
Total	emissions of waste (t)	2,111	99	1,163	1,191	12,776	2,736	4,237
Date of I	SO14001 certification acquisition	June 1999	January 2010	December 2000	September 2000	December 1999	December 2008*	December 2011
							*Learn the certification only	y Body Division

Notes 1. All data, except the number of employees, were derived from performances of all manufacturing facilities during FY2011. The number of employees was based on the companies' data as of March 31, 2012.
2. Conversion to CQ, and total energy consumption were based on statistical data of each region, country, and that of IEA for 2011.
3. Total emissions of waste are expressed as a composite of the amount recycled and the amount disposed.

Courses in Environmental Education and Training in Japan (excluding general environmental courses)

Organizer	No.	Course name	Target		Partic	ipants	
				FY2008	FY2009	FY2010	FY2011
Head Office	1	Advanced environmental education (held every two years)	Environmental specialists (Komatsu and affiliates)	—	16	—	16
	2	Overview of the ISO14000 series	Administrators (Komatsu, affiliates, and business associates)	32	55	83	74
	3	Training of internal auditors / Refresher courses	Environmental auditors (Komatsu, affiliates, and business associates)	41	40	273	103
	4	Development and manufacturing (introductory)	Development and manufacturing staff (for second-year employees)	139	182	112	266
	5	Environmental training for manufacturing engineers	Assistant foremen/ foremen/ manufacturing engineers/ students of Komatsu Institute of Technology	66	91	114	158
	6	Training new employees	New Employees (Komatsu and affiliates)	227	115	200	229
	7	Lectures on the environment, experience-oriented education	Komatsu Group managers and employees	1,329	398	1,002	1,300
	8	Education to refresh environmental understanding (e-Learning)	Komatsu Group managers and employees	164	237	194	251
	9	Education for biodiversity	Komatsu Group managers and employees	—	—	—	889
Divisions	1	Education in the basics of auditing	Managers and employees	153	98	99	183
overseeing	2	Overview of the ISO14000 series	Managers and employees	302	836	468	409
mental	3	Training of internal auditors	Environmental auditors	59	7	26	27
manage-	4	Training new employees	New Employees	675	1,116	1,240	1,020
plants	5	Regulatory education and personnel exchange	Employees	1,276	517	448	1,232
	6	Specialist training	Environmental conservation practitioners (persons involved in regulatory affairs, etc.)	1,776	2,466	952	2,165

In addition to the education and training courses listed above, Komatsu also held courses dealing with environmental issues intended for sales agents.

Number of Persons Having Environment-related Certificate

Certificate name	Number of persons with certificate*							
	FY2008	FY2009	FY2010	FY2011				
Pollution control administrators	195 (49)	177 (39)	178 (33)	241 (33)				
Energy administrators	40(13)	48 (13)	42 (10)	45 (10)				
Environmental management system auditors	8	7	6	6				

*Figures in parentheses indicate the number of officers required.

Environmental Costs (Investments and expenses)

Effects on Society*

Environmental impact reduction effects	Tangible benefits
 Environmental impact reduction resulting from on-site recycling methods Environmental impact reduction resulting from product operation Waste components reduction resulting from "Reman" business 	 Reduction of expenses for processing waste materials Savings in operating and maintenance costs Reduction of repair costs

*Concerning the effects on society derived from product use by customers, the major items of qualitative information are shown here as a reference.

Komatsu and Komatsu Group manufacturing facilities in Japan

Cat	egory	Investmen	t		Expenses				
		FY2010	FY2011		FY2010	FY2011			
		Investment* (millions of yen)	Investment* (millions of yen)	Contents	Expenses* (millions of yen)	Expenses* (millions of yen)	Contents		
1. B	usiness area cost	1,544	795		3,692	3,624			
	① Pollution prevention cost	1,107	400	 Investment for installation and conversion of pollution mitigation/prevention facilities (installation of particle collectors, effluent processing facilities, etc.) 	1,191	1,189	 Cost of maintaining equipment for mitigation/prevention of air and water pollution and for noise and vibration prevention (labor and depreciation costs) 		
	② Global environmental conservation cost	291	375	 Investment for implementing energy conservation measures (converting lighting to LED, installation of solar power generators, and such) 	1,162	1,401	 Cost of maintaining energy conservation facilities, such as cogeneration systems (labor and depreciation costs) 		
	③ Resource circulation cost	146	20	 Investment for reducing the volume of waste materials (conversion of recycling facilities, introduction of equipment for separating waste, etc.) 	1,339	1,034	Waste material processing cost		
2. U	pstream/downstream cost	1	0		259	234	 Reduction of the environmental impact of components, etc. shipped outside Japan Reduction of the environmental impact of mass-production units 		
3. A	dministration cost	23	450	 Investment for beautifying manufacturing sites 	929	885	 Cost of maintaining environmental management systems Cost of creating green spaces and beautifying manufacturing sites 		
4. R	&D cost	172	202	 Investment in research facilities for reduction of environmental impact 	14,128	14,330	Cost of R&D activities to reduce the environmental impact of products Cost of R&D activities to develop environmentally-friendly construc- tion equipment		
5. S	ocial activity cost	0	15		13	21			
6. E	nvironmental remediation cost	0	0		418	531	 Cost of conducting surveys and remedial countermeasures related to soil and groundwater contamination PCB disposal costs 		
Tota	1	1,740	1,462		19,440	19,625			

*All figures are rounded off to the nearest million yen.

Environmental Effects

Environmental in	npact reductio	n effects	Economic benefits						
Items of	Reduction	Rate of	Tangible benefits			Avoidance benefits of	Contribution to profits		
environmental impact	amount (t/year)	year-on-year changes (%)	Туре	Monetary value* (millions of yen)	Major activities	environmental risks (see Note below)	(see Note below)		
CO ₂ emissions	451	0.2	Energy conservation	492	• Energy conversion, etc.				
			Resource conservation	3		There were no accidents or	Proceeds from mobile recycling actuinement		
Water consumption	-671,115	-11.0	Waste materials reduction	867	 Promotion of recycling through thoroughgoing sorting 	FY2011 that led to violations of the law.	 Proceeds from value added due to reduced environmental 		
			Gain on sale of valuables	710	 Reuse of furnace slag for roadbed materials 	 No litigation costs were required in Japan during FY2011. 	 impact of products (engines) Proceeds from Reman business 		
Waste materials	309	1.6	Other	6					
generation			Total	2,077					

*Figures are rounded off to the nearest million yen.

Note: Komatsu used statements instead of numeral figures to describe the "Benefits from avoidance of environmental risks" and the "Contribution to profits." The company will further develop concepts and ways to understand effects in these categories. The sales amounts of businesses for content presented in "Contributions to profits" in FY2011 are as follows:

Mobile recycling equipment business: 3.3billion yen
 Engine business: 117.5 billion yen (Total for intra-Group sales from the Engine Business Division)
 "Reman" business: 42.8 billion yen (Worldwide Reman business sales from April 2011 to March 2012)

Data

and Komateu Group manufacturing facilities in Jar

Environmental and Social Activities to Date & External Commendations

> Overview of Komatsu's Environmental and Social Activities to Date

1962	Began continuous support for the Flower Association of Japan since its founding
	Earth Environment Committee established
1991	Company name changed in Japanese public relations to "Komatsu," with new corporate brand logotype
1992	Komatsu Earth Environment Charter and Environmental Action Plan formulated
1004	First Environmental Report published
1994	Board of Corporate Auditors established
1997	Oyama Plant becomes first in Japanese construction equipment industry to acquire ISO14001 certification
1000	Ethics Committee established (Renamed as Compliance Committee later)
1990	First edition of Komatsu's Code of Worldwide Business Conduct published
1000	Executive Officer system established; Board of Directors reorganized
1999	Compensation Council established
2000	First Global Environmental Affairs Meeting convened
2000	Environmental Report again published; published annually thereafter
2001	Compliance Department established
2002	All seven Komatsu Group manufacturing facilities in Japan acquire ISO14001 certification
2003	Environmental Affairs Department established
2004	Corporate Social Responsibility Department established
2005	First European Health, Safety, and Environment Meeting convened
2006	All Komatsu Group manufacturing facilities in Japan attain "zero emissions"
2008	The KOMATSU Way explicitly defined and promotion activities launched
2007	Seventh edition of Komatsu's Code of Worldwide Business Conduct published

Agreement concluded with Japanese NPO Japan Mine Action Service (JMAS) The Komatsu Group in Japan acquire ISO14001 integrated certification 2008 Development of PC200-8 hybrid hydraulic excavator announced Signed the United Nations Global Compact Started Angola local reconstruction project with JMAS PBZ and PAS series of press brakes acquire MF eco machine* certification 2009 Basic agreement reached between Komatsu, Adaro and UT on the biodiesel project in Indonesia The MF Eco machine Certification System is an eco-label established by the Japan Forming Machinery Association. 2010 New mediumand long-term targets are set to reduce CO₂ emissions from manufacturing facilities Komatsu Earth Environment Charter is revised Vehicle equipped with a new type of engine that meets Tier4 emission standards for Japan, the U.S.A. and Europe is introduced in the North American Market Komatsu's "Declaration of Biodiversity" is established Local reconstruction project in Cambodia is completed with JMAS CSR themes are defined. 2011 "Komatsu Green Park" opens in Komatsu City, the company's birthplace Eighth edition of Komatsu's Worldwide Code of Business Conduct published Held the opening ceremony of the pilot plant for the Biodiesel Fuel Project to be implemented by Komatsu, Adaro, and UT Komatsu's "CSR Procurement Guideline" is established 2012 Established the "Komatsu Kids Oyama" nursery center in the Oyama Plant

Recent External Commendations and Evaluations on Komatsu's Environmental Conservation and Social Activities

2011Jan.	Ranked 16th among 253 companies in Japan in Nikkan Kogyo Shimbun Ltd.'s Seventh Annual Corporate Performance Rankings
	Ranked 29th among 475 companies in the 14th Corporate Environmental Management ranking by Nikkei Inc
Feb.	Awarded first prize for the 2011 Integrity Award from the Internal Control Council of Japan (ACFE)
Apr.	Komatsu Hybrid System for construction equipment receives the 2010 JSME Medal for New Technology from the Japan Society of Mechanical Engineers (JSME)
Jul.	Komatsu's mobile recycler is nominated as an example of the 2011 Recommended Technology at the New Technology Utilization System Review Conference organized by the Ministry of Land, Infrastructure and Transport
Aug.	Komatsu CSR is awarded the Bronze Class by SAM Corporation, Switzerland's SRI assessment company
Nov.	Komatsu is ranked 7th among 1,005 companies according to the "NICES" company-rating system by Nikkei Inc
2012Jan.	Komatsu is ranked 38th among 449 companies in the 15th Corporate Environmental Management Ranking by Nikkei Inc
Mar.	Komatsu's "CSR & Environmental Report 2011" receives the award of excellence at the 15th Green Reporting Awards, organized by the Green Reporting Forum and Toyo Keizai Shinbun, Inc
	Komatsu is ranked 19th among 1,117 companies in the CSR Corporate Ranking by Toyo Keizai Shinbun, Inc
	Komatsu is ranked 4th among 611 companies in the Corporate Integrity and Transparency Assessment by Integrex Inc

Komatsu Ltd. is included in the Socially Responsible Investing (SRI) indexes indicated below.





Responsibility rated by cekom r e s e a r c h

Komatsu participates in the World Business Council for sustainable development.



Komatsu participates in the Japan Pavilion of RIO+20 (United Nations Conference on Sustainable Development).



Independent Review on CSR & Environmental Report 2012

Regarding the Independent Review

Komatsu views the independent review process as crucial for ensuring the integrity and objectivity of its CSR & Environmental Report. For that reason, Komatsu has received an independent review from Deloitte Tohmatsu Evaluation and Certification Organization Co., Ltd., a member of the Deloitte Touche Tohmatsu Group. The results are as represented below with regard to the information appearing in the CSR & Environmental Report 2012.

http://www.tohmatsu.com/teco/

(TRANSLATION)	
	Independent Practitioner's Review Report
	July 18, 2013
Mr. Kunio Noji	
President and CEO, Ko	matsu Ltd.
	Hiroshi Inanag
	Chief Executive Office
	Deloite Tehmatsu Evaluation and Certification Organization Co., Ltd
 Scope of the Review We have reviewed the "CSR & I assume from an independent p included in p11-27 and p43-49 of measured and calculated, referrin GRI Sanairability Reporting Cas 	inviewmental Roport 2012" prepared by Komatsu Lad. ("the Company"). The purpose of our review was to provide limite mettioner about whether the quantitative environmental information for the protoci from April 1, 2011 to March 33, 2010 "CSR. & Environmental Roport 2012" checicalar relative to a the "Quantitative Environmental Information", as assound to the Information and the Company of the Company of the State of the State of the State of the Environment] and them to environ the Roport 2012" checicalar relative to a the "Quantitative Environmental Information", as assound to the Information and the Company of the Environment] and them to environ 1. D is nonvolvemental and address environment and the Company.
	reares (and the second of the particular constraints of the comback
2. Responsibility of the Marag The "CSR & Environmental Rep to the raview performed on the Q	namme (vanue, e.g.), a namme en en one operation en operation of the company princip and 2012" is the responsibility of the Company's management. Our responsibility is to provide limited assumece with respon artitudive Environmental Information from an independent practitioner.

- To obtain an adequate and valid standard (Dasis for providing limited assumers with respect to our conclusions, we performed our review with reducents to the International Standard on Assumers Draggement (SSAE) 3000 (strend by the International Foldmattion of Assumers in Standard Proposed Environmental Report Review Standard (insued by the Apaenee Meissing of the Environment in March 2006). The nerview producture performance the tree Quentities Distribution and additional of 1.13 generity information to stremmy tables and apporting documents on a sample basis; 2) introducing the responsible parameter of the visits; and 5) comparing information with other available supporting information to the relocant minimum, the Company's regulations, and EO-related documents; 4) site visits; and 5) comparing information with other available supporting information.
- 4. Conclusions On the basis of the review procedures described in the protoiling paragraph, nothing has come to our attention that caused us to believe the Quantitative Environmental Information was not accurately measured or calculated, referring to the Environmental Reporting Caldelines - Year 2012 varion (insued by the Japanese Ministry of the Environment) and CRU Statianability Reporting Guidelines (varion 3.1), in accordance with calculation methods adopted by the Compares.

Supplementary Explanation regarding the Conducting of Independent Review Procedures

Supplementary explanation regarding independent review procedures



Supplementary explanation regarding site visits to business units

1.Business units visited in this review:

Komatsu Ltd. Head Office
 Ovama Plant

 Visits to business units take place in a planned rotation. Records for business units not visited during this review were reviewed at the Komatsu Ltd. Head Office.



Executing a review at the Head Office (with persons in charge of CSR Department photo)



Executing a review at the Oyama Plant

Scope of This Report

• Komatsu (parent company) manufacturing facilities, specifically the following eight plants The Awazu Plant [including the Komatsu NTC Ltd (KM Division).], the Kanazawa Plant [including the Kanazawa-Daiichi Plant, the Kanazawa-Daini Plant and the Kawakita Plant], the Osaka Plant [including the Rokko Plant], the Ibaraki Plant and the Oyama Plant [including Komatsu Cummins Engine Co., Ltd., Industrial Power Alliance Ltd. and GIGAPHOTON, Inc.], the Koriyama Plant, and the Shonan Plant [including KELK Ltd.], the Tochigi Plant.

• Komatsu Group manufacturing facilities in Japan, specifically the above eight plants and the following four business units Komatsu Castex Ltd., Komatsu Cabtec Co., Ltd., Komatsu NTC Ltd. [including Lossev Technology Corporation, Toyama Kiko Corporation, and D.S.K. Co., Ltd.] and Komatsu House Ltd.

Komatsu Group manufacturing facilities outside Japan, specifically the following 23 plants Komatsu America Corp.,[Chattanooga Manufacturing Operation], [Peoria Manufacturing Operation], [Newberry Manufacturing Operation], Komatsu do Brasil Ltda., Hensley Industries, Inc. (The Americas), Komatsu UK Ltd., Komatsu Hanomag GmbH (Germany), Komatsu Mining Germany GmbH, Komatsu Manufacturing Rus, LLC, Komatsu Utility Europe S.p.A. (Italy), Stavmek s.r.o (Czech Republic), Komatsu Forest AB (Sweden), PT Komatsu Indonesia Tbk, PT Komatsu Undercarriage Indonesia, Bangkok Komatsu Co., Ltd., Bangkok Komatsu Industries Co., Ltd., L&T-Komatsu Limited (India), Komatsu India Pvt. Ltd., Komatsu Shantui Construction Machinery Corp, and Komatsu Uchangzhou) Construction Machinery Corporation, Komatsu Uchangzhou) Foundry Corp., Komatsu (Shandong) Construction Machinery Corp, and Komatsu Undercarriage China Corp.

• Komatsu Group manufacturing facilities including outside Japan: All of the 35 above-mentioned offices are shown.

CSR & Environmental Report 2012 50





Komatsu Ltd.

CSR Department and Environmental Affairs Department 2-3-6, Akasaka, Minato-ku, Tokyo 107-8414, Japan http://www.komatsu.com/CompanyInfo/csr/

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