

KOMATSU



**Environmental & Social Report
2005**

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 Masahiro Sakane	
Capital:	¥70,120 million (US\$655 million*) (as of March 31, 2005)	
Net sales (for the fiscal year ended March 31, 2005):	Consolidated	¥1,434,788 million (US\$13,409 million*)
	Non-consolidated	¥523,592 million (US\$4,893 million*)
	*U.S. dollar amounts are converted at the rate of ¥107 = US\$1.00, the prevailing rate announced by the Federal Reserve Bank of New York on March 31, 2005. Amounts less than 1 million have been omitted.	
Main lines of business (Komatsu Group):	Manufacture and sale of construction and mining equipment, industrial machinery & vehicles and electronics products. Komatsu also engages in other business areas such as housing, transportation and logistics equipment.	
Number of employees:	Consolidated	33,008 (as of March 31, 2005)
	Non-consolidated	5,666 (as of March 31, 2005)
Komatsu Group profile:	Number of companies (consolidated subsidiaries)	141 (as of March 31, 2005)

•Further information can be found on the Komatsu website.

<http://www.komatsu.com/>

Scope of This Report

- **Komatsu's (parent company's) manufacturing facilities, specifically the following four plants:**

The Awazu Plant (including the Defense Systems Division, Industrial Machinery Division, and Komatsu Machinery Corporation); the Osaka Plant; the Oyama Plant (including Komatsu Cummins Engine Co., Ltd., Industrial Power Alliance Ltd., Komatsu Castex Ltd. [Oyama Plant], and GIGAPHOTON, Inc.); and the Mooka Plant.

- **Komatsu Group's domestic manufacturing facilities, specifically the above four plants and the following ten business units:**

Construction Equipment Electronics Division (including Komatsu Electronics, Inc.); Komatsu Zenoah Co. (Kawagoe Plant, Koriyama Plant); Komatsu Electronic Metals Co., Ltd. (Hiratsuka Plant, Miyazaki Plant, Nagasaki Plant); Komatsu Forklift Co., Ltd.; Komatsu Engineering Corp. (Awazu Plant); Komatsu House Ltd.; and Komatsu Castex Ltd. (Himi Plant).

- **Komatsu Group's overseas manufacturing facilities, specifically the following 19 business units:**

Komatsu America Corp. (Chattanooga Manufacturing Operation, Candiatic Manufacturing Operation, Peoria Manufacturing Operation, Newberry Manufacturing Operation); Hensley Industries, Inc.; Komatsu Mexicana S.A. de C.V.; Komatsu do Brasil Ltda.; Komatsu UK Ltd.; Komatsu Forest AB; Komatsu Hanomag GmbH; Komatsu Mining Germany GmbH; Komatsu Utility Europe S.p.A.; PT Komatsu Indonesia Tbk; Bangkok Komatsu Co., Ltd.; L&T-Komatsu Limited; Komatsu (Changzhou) Construction Machinery Corporation; Komatsu (Changzhou) Foundry Corporation; Komatsu Shantui Construction Machinery Co., Ltd.; and Formosa Komatsu Silicon Corporation.

*Data for Advanced Silicon Materials LLC is included up to FY2004.

*Data for Hensley Industries, Inc. and Komatsu Forest AB are included from FY2004.

- **Komatsu Group and overseas manufacturing facilities, specifically all 33 facilities listed above.**

- **Main changes in Group organization**

Komatsu reached a fundamental agreement on the sale of 75% of its equity ownership in Advanced Silicon Materials LLC, an American subsidiary, to Renewable Energy Corporation AS, a Norwegian company. Komatsu intends to complete this sale during the first half of FY2005.

Komatsu Remanufacturing Co., Ltd. was consolidated on April 1, 2005, and its Reman Business Unit in the Product Support Division was newly established at that time.

Notes from the Editor

Editorial Policy

Komatsu published its first *Environmental Report* in 1994 and its second in 1997. Since 2000 it has published this report annually, reflecting its efforts to boost awareness of the various measures for the environment undertaken in its business activities. Komatsu continues to undertake activities which demonstrate that fulfilling responsibilities to the greater society and making efforts to conserve the global environment rank among its top managerial priorities.

Beginning with the FY2004 report, Komatsu changed the title from its *Environmental Report* to its *Environmental & Social Report*. In the environmental activities section of the FY2005 report, Komatsu strived to make the entirety of the efforts it undertakes by means of its various business activities as easy to understand as possible. At the same time, in the social activities section, Komatsu has endeavored to cover as many of its activities as possible, including newly-included items such as Corporate Governance and Risk Management as well as Communication with Our Stakeholders and Social Contributions.

*Komatsu conducts business operations directly and through more than 125 subsidiaries and more than 40 equity method affiliates organized under the laws of countries throughout the world. In this report on environmental and social activities, 'Komatsu' and 'Komatsu Group' are at times used informally to refer to the activities of all or some of the Komatsu family of companies, without regard to their separate legal identities.

Period Covered

This report covers the data for the period from April 1, 2004 to March 31, 2005 as a general rule. However, a portion of the report also touches upon the period after April 1, 2005.

Guidelines Used

"Environmental Report Guidelines 2003" (Ministry of the Environment of Japan); "The 2002 Sustainability Reporting Guidelines" (Global Reporting Initiative [GRI])

Subsequent Reporting Schedule

- Japanese version: Expected June 2006
- English version: Expected July 2006



Contents

Overview of the Komatsu Group

Company Profile	
Scope of This Report	
Notes from the Editor	1

Corporate Social Responsibility of the Komatsu Group

Message from the President	2
The Basic Stance of Management	3
Corporate Governance, Compliance, and Risk Management	4

Environmental Activities

Komatsu's Relationship with the Environment and with Society	6
Komatsu Earth Environment Charter	7
Environmental Action Plan and Results for FY2004	8
Business Activities and Environmental Impact	10
Environmental Management Structure	12
Environmental Accounting	14
Providing Products and Services that Coexist with the Environment	16
Environmental Conservation in Manufacturing Operations	20
Environmental Risk Management	22
Activities for Reducing Environmental Impact from Upstream/Downstream Operations	24
Environmental Activities of Overseas Manufacturing Facilities	25

The Komatsu Group's Relationship with Society

Working along with Our Customers	28
Working along with Our Employees	30
Communication with Our Stakeholders	32
Social Contributions	34

Data

Environmental Data by Domestic Manufacturing Facility	36
Environmental Data by Overseas Manufacturing Facility	40

Independent Review

Independent Review on <i>Environmental & Social Report 2005</i>	41
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External Commendations on Environmental Conservation and Social Activities and External Evaluations	8
Overview of Komatsu's Environmental and Social Activities to Date	27

Message from the President



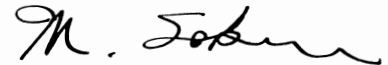
Komatsu holds the maximization of corporate value as a fundamental principle of management. Komatsu considers corporate value to be the total degree of trust it receives from all of its stakeholders. For that reason, it pursues "Quality and Reliability" throughout the entire corporation, rather than through its products alone. In concrete terms, this means that the company consistently pursues compliance, solid corporate governance with a high degree of transparency, and activities which promote environmental conservation, safety, and the like in ways appropriate for Komatsu's own corporate culture all the way down to the furthest reaches of the corporation.

From the perspective of top management, no matter how much good news is written about a company, a single piece of bad news can completely counteract it. In business, therefore, "good news makes no news. But no news often means bad news, which we must accept as good news." If we should happen to hear bad news, we will not attempt to cover it up or keep up appearances, but rather face it head-on with sincerity, working to prevent a reoccurrence.

In FY2005, the most important environmental activities for Komatsu involved meeting Tier 3 Emissions Regulations for diesel engines. As manufacturers of construction equipment and vehicles all around the globe gear up to undertake model upgrades, this will be a year in which Komatsu's strengths will be tested. Komatsu places the smooth introduction of its new models to the market as its first priority all throughout the company, not only during development but also during procurement, manufacturing, sales and after-sales service.

As Komatsu continues the environmental conservation activities that it has been implementing for years at its domestic manufacturing facilities, it is also strengthening the activities it undertakes to lower its environmental impact through the cooperative efforts of its overseas subsidiaries, sales and rental stores and suppliers.

Masahiro Sakane
President and CEO



On the Publishing of *Environmental & Social Report 2005*



In order to increase the public's understanding of the Komatsu Group's activities for social responsibility, last year the title of this report was changed to the *Environmental and Social Report*. In addition to the information on Komatsu's environmental conservation activities, the report now also highlights the company's socially-conscious aspects, including information on corporate governance, risk management, communication activities, and social contributions.

Komatsu's social activities for the last fiscal year include the establishment of its Corporate Social Responsibility (CSR) Department, which administers CSR comprehensively for the entire Group, and the revision of the Komatsu Code of Worldwide Business Conduct in 2003 and again in 2004 in order to strengthen the degree to which all employees in the Group comply with the rules.

As for environmental conservation activities, Komatsu convened a Global Environmental Meeting at which representatives from each business unit and from overseas subsidiaries made presentations on the status of their activities and exchanged views. Additionally, domestic manufacturing facilities saw improvements in their ability to monitor chemical substances through the use of computers, the percentage of environment-friendly goods purchased rose, and in logistics, the percentage of full-load trips increased, demonstrating just some of the ways in which Komatsu is undertaking close and careful strategies to enhance environmental conservation.

In FY2005, Komatsu will begin implementing its response to Tier 3 Emissions Regulations for diesel engines. However, Komatsu's efforts do not stop at meeting these regulations. Rather, it is also working to create products that excel in their environment- and people-friendliness, featuring lowered noise and vibration, an increased recyclability ratio, and lowered amounts of substances of environmental concern.

In the future, Komatsu intends to strengthen further its efforts towards corporate social responsibility at the global Group-wide level, such as in the areas of compliance, the environment, and safety.

Komatsu looks forward to the opportunity to hearing your frank views on this report.

Masahiro Yoneyama
Director
Senior Executive Officer
Supervising Environment & Safety and Compliance



The Basic Stance of Management

The entire Komatsu Group pursues Quality and Reliability and promotes management that emphasizes corporate governance in order to maximize corporate value.

The Basic Stance of Management

The cornerstone of Komatsu's management is commitment to Quality and Reliability for maximization of its corporate value. This policy not only applies to our products and services but also extends to all other aspects of the Komatsu Group, including organizations, businesses, employees and management.

Principles that Enhance Quality and Reliability

The Komatsu Group has established the following five points as principles reflecting what should be done in order to enhance its Quality and Reliability.

1. Constantly provide environment-friendly, safe and innovative products and services from the viewpoint of our customers
2. Constantly promote self-initiated innovations in technology and management
3. Promote consolidated management from global perspective
4. Work for the community as a good corporate citizen
5. Provide employees with opportunities for challenge and creativity

Emphasis on Corporate Governance

To maximize our corporate value, it is important for us to design a framework in which we can enhance our corporate value in a continuous, steadfast manner. This task calls for not only maximizing the market value of Komatsu by increasing the stock price and working to expand sales and profits but also striving to satisfy stakeholders, especially customers, to the fullest extent.

Top management officers of Komatsu Group companies are required to have full awareness of Corporate Social Responsibility ("CSR"), eliminate risky business with no substance and conduct steady management, while making constant efforts to ensure the Quality and Reliability of management. They are also required to promote corporate governance-driven management by revitalizing the Board of Directors, establishing the internal controls system, enhancing the transparency of management, and implementing other related measures.

All employees of Komatsu Group companies are required not to postpone but to promptly work on solutions and corrections when they discover issues and/or problems related to the Rules in all business areas and domains.

Promotion of the "Spirit of Manufacturers"

It is extremely important for Komatsu as a manufacturer to promote reform based on the "Spirit of Manufacturers" concept in order to enhance its competitiveness.

This concept means that we, as a manufacturer, must provide products (hardware and software) that make our customers feel satisfied. It also means that we have to rise to every challenge and to constantly produce safe and innovative products in the spirit of unified teamwork of all employees, from research and development, procurement, production and sales through after-sales service. It also emphasizes that we must care about environmental friendliness in all our activities through a product's lifecycle.

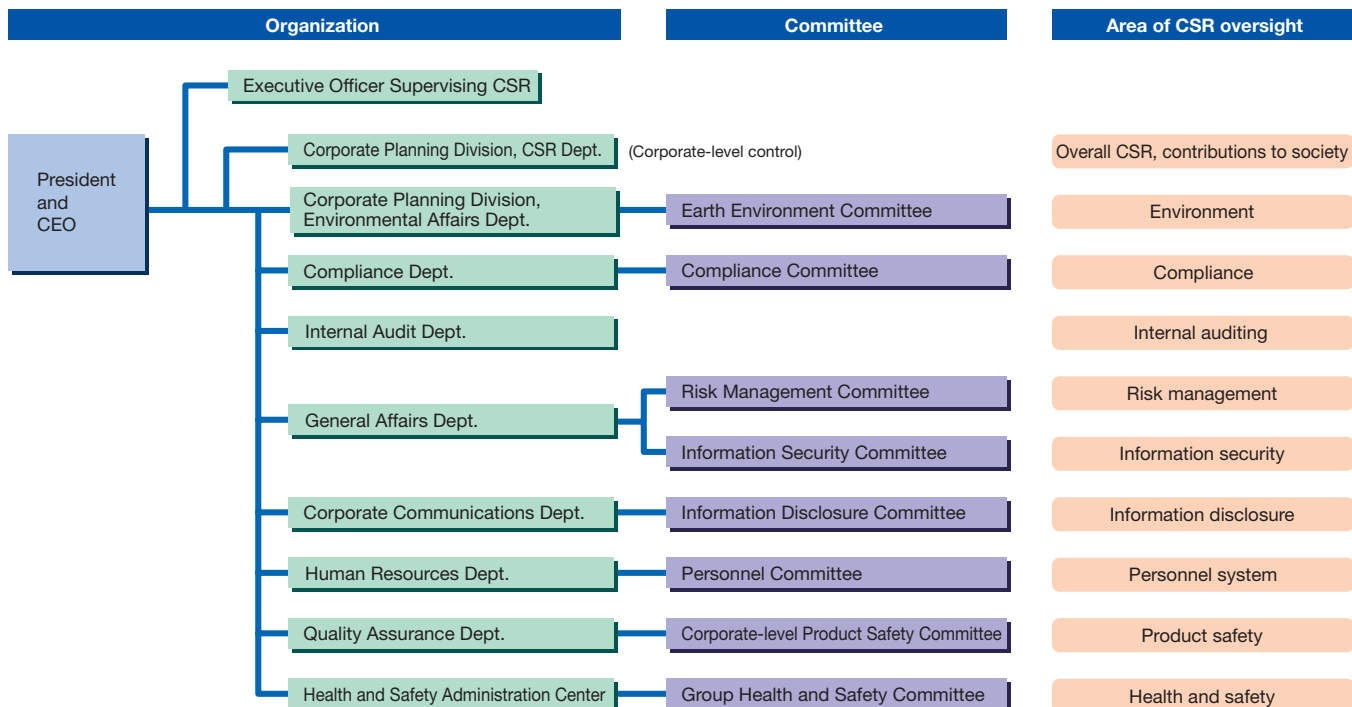
Establishment of the Corporate Social Responsibility (CSR) Department

In May of 2004, Komatsu established a Corporate Social Responsibility (CSR) Department, which has corporate-level authority and responsibility for compliance and for the conducting of business administration that takes Komatsu's stakeholders fully into account. In doing so, it solidified trust in the company that extends globally and reaches throughout the entire Komatsu Group.

Organization Related to Corporate Social Responsibility

"Corporate social responsibility" means either the responsibility that the company holds towards the greater society, or activities that enable a company to continue to receive the trust from society. The Komatsu Group is pursuing Corporate Social Responsibility through the organization laid forth below.

■ Establishment of the Corporate Social Responsibility (CSR) Department



Corporate Governance, Compliance, and Risk Management

In order to foster good relationships with society and with its stakeholders, the Komatsu Group is promoting activities that aim for increased trust in the Group.

Corporate Governance

Overview of Corporate Governance Structure

The Komatsu Group is promoting management that emphasizes corporate governance in order to expand and develop the company continually. In executing management, Komatsu aims for the maximization of corporate value, with (1) increasing efficiency and agility, (2) maintaining sound practices (oversight, internal auditing functions), (3) ensuring of transparency (explanatory responsibility, disclosure responsibility), and (4) compliance as its basic principles.

Enhancing Corporate Governance

Corporate governance at Komatsu has been enhanced primarily through the 1999 establishment of an Executive Officer system and reorganization of the Board of Directors, resulting in a smaller Board and the election of an external director. The Compensation Council was also created that year. Prior to this, in 1994, the Statutory Auditors (Board), which includes external auditors, had been reorganized, to be followed by the 1995 launch of Komatsu's International Advisory Board. In 1998, the company created an Ethics Committee, renamed the Compliance Committee in 2001, with the President and

CEO as committee chair (see P. 3). In 2002, the system of having geographical headquarters and directors supervising particular geographical areas was introduced, engendering a further strengthening and enhancement of Komatsu's efforts toward improved corporate governance.

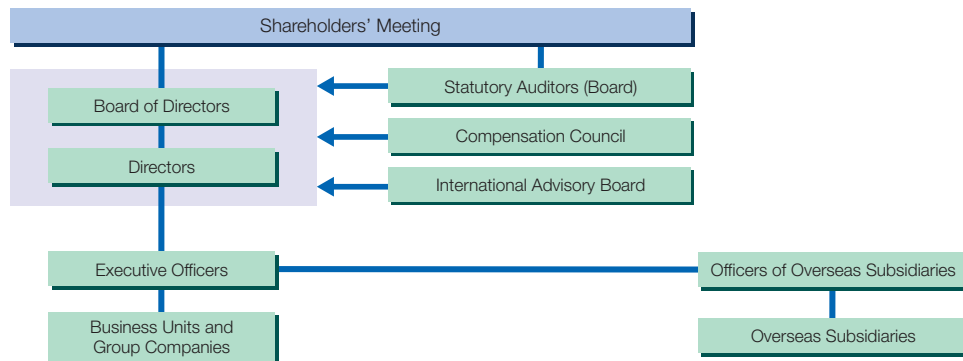
Measures and Policies in the Operations Stage

In order to make such revisions effective, Komatsu places great importance on improvements at the point of implementation. In particular, the effectiveness of the discussions of the Board of Directors is being enhanced by thoroughly examining in advance the issues that will be taken up by the Board. In addition, the top management of Komatsu also reports on operations to auditors.

International Advisory Board

From an international perspective, in order to receive beneficial advice on global management, Komatsu established an International Advisory Board in 1995. The Board invites eminent persons from overseas in the areas of government and business to serve as advisors. Meeting twice annually as a rule, the Board convenes on an ongoing basis.

Organizational Chart for the Corporate Governance System



Activities for Becoming a “Responsible Company”

Activities for Becoming a “Responsible Company”

In order to enhance Quality and Reliability, which constitute Komatsu's fundamental principle of management, the Group has undertaken activities which aim at creating a “responsible company.” In 1990, the company launched the Committee for the 90's and began developing its image as a company open to society as it responded to the development of its businesses globally. In 1996, the Committee for the 90's changed its name to the Just Meet 21 Committee, and it was at this time that Komatsu conducted activities aimed at becoming a “good company,” which is the form that Komatsu should take in the 21st century.

Themes for Komatsu's activities:

- Clarification of Komatsu's corporate approach
- Communication
- A better relationship between Komatsu and society (activities as a good corporate citizen)
- A better relationship between Komatsu and its employees (activities to improve job satisfaction)

Results of the Activities of the Just Meet 21 Committee

Theme	Activity
1. Clarification of Komatsu's corporate approach	Change of company name in Japanese public relations from “Komatsu Manufacturing” to “Komatsu”
	Adopted new corporate brand logotype
2. Communication	Development of investor relations
	Holding of “Open House” Days at plants and research facilities
	Holding of explanations of the state of the company by executive directors to all employees at each business unit
	Introduction of “groupware” to speed up business and enhance added value
3. A better relationship between Komatsu and society (activities as a good corporate citizen)	Past dispatch of a member of an Antarctica wintering team
	Introduction of support system for foreign students
	Creation of Komatsu Green Foundation
	Support for the Flower and Green Institute of the Flower Association of Japan
	Conducting the Floral Komatsu program (activities to plant flowers around manufacturing facilities)
	Creation of Komatsu Women's Judo Club
4. A better relationship between Komatsu and its employees (activities to improve job satisfaction)	Komatsu Earth Environment Charter formulated
	Introduction of new system of specialists
	Introduction of flexible working time system
	Introduction of discretionary working time system (free time system)
	Full commitment to various forms of leave time (time off to refresh oneself, for volunteer work, for childcare, for nursing care)
Introduction of Just Meet 21 Plan for personnel, emphasizing performance-based promotions and human resource development	

Following Best Business Practices (Compliance)

Corporate Value and Compliance

Komatsu considers corporate value to be the sum total of the degree of trust placed in a company by all its stakeholders and by the surrounding society. It recognizes trust from society to be of particular importance. In order to earn the trust of society, Komatsu puts compliance at the forefront and considers it necessary to apply this to its business management.

As the mass media continues to report issues of inadequate governance in various corporations, the Komatsu Group has also experienced inadequacies in technical training for the operation of heavy machinery and vehicle inspection operations. Upon the occurrence of any such irregularities, Komatsu will work to regain the trust of society through the prompt adoption of response measures, full-fledged efforts to prevent recurrence, and strengthening of compliance.

Compliance Organization

In order to enhance compliance Group-wide, Komatsu has established a Compliance Committee to promote compliance with best business practices by discussing and resolving relevant issues. The committee is chaired by the President and CEO and has among its members Directors, Executive Officers, and labor union representatives, with management and labor conducting efforts jointly. In addition, the Executive Officer Supervising Compliance and the Compliance Department, which handles compliance-related matters exclusively, can be found at the Komatsu Head Office, thereby creating a system that will continuously strengthen and promote efforts for compliance towards the business rules under which the Komatsu Group operates.

Furthermore, Komatsu has established a Business Rule Consultation Office in order to provide a place at which views can be exchanged openly and frankly about issues pertaining to best practices in business. The services offered by this Consultation Office include consultations about individual issues raised by employees, information provision, responses to internal reports, surveys regarding breaches of corporate or legal requirements and proposals of remediation measures for such breaches.

Enforcement of Code of Business Conduct

Komatsu has established Komatsu's Code of Worldwide Business Conduct (enacted in January 1998 with the latest revision being made in December 2004) to outline the rules to be followed by those responsible for management of the Komatsu Group and, indeed, by all employees. The entire Code of Business Conduct is displayed on the Komatsu website.

Each company within the Komatsu Group, in addition to enforcing Komatsu's Code of Worldwide Business Conduct, is fostering a compliance-focused mindset among all employees through awareness-raising, education, and internal auditing. In addition, executives and all other managers at each company have submitted written pledges that they will themselves comply with all applicable regulations and with Komatsu's Code of Worldwide Business Conduct and furthermore that they will enforce compliance thoroughly.

Through activities such as these, Komatsu aims to earn even greater respect from all its stakeholders and from society.

Risk Management

Basic Risk Management Policy

Risk management aims at ensuring the safety of all resources involved in business operations, including people, goods, money, and trust. For this reason, the Komatsu Group sets forth as its basic policy the principles of

- projecting risk in advance and planning preventive measures, and
- minimizing damage in the event that irregularities occur.

Risk Management Organization

Komatsu implements its risk management organization throughout the entire Komatsu Group. The Group has a Risk Management Committee to administer and promote risk management during normal business as well as an Urgent Response Measures Headquarters, which is set up upon the occurrence of an irregularity. Furthermore, divisions holding primary responsibility for each area of risk have been established by the Risk Management Committee. These divisions plan and administer preventative measures and, upon the occurrence of an irregularity, support the Urgent Response Measures Headquarters and the Headquarters for On-site Countermeasures.

Activities in FY2004 and Future Plans

Revision of Risk Management Manual (January 2005)

In keeping with changes in the Komatsu Group's business environment, the Group has re-identified potential areas of risk and conducted a broad-based revamping of risk categories. The Group decided that, upon the occurrence of an irregularity, it will evaluate the situation using as its fundamental barometer the degree to which the impact upon the management of the business is important to the company. Divisions holding primary responsibility for various areas of risk as well as preventative measures and measures for minimizing damage were also decided upon.

Proactive Preparatory Measures for Major Earthquakes

Regarding measures to deal with risks from major earthquakes, the Group undertook a reevaluation and strengthening of its efforts, focused on the areas of (1) the enhancing of relevant manuals, (2) the strengthening of communications functions, and (3) the continued implementation of measures to increase the degree of resistance to earthquakes.

Future Plans

The Komatsu Group intends to undertake actions in the following areas in the months and years to come.

- Further enforcement of all manuals, rules, and regulations
- Continued implementation of self-conducted checks regarding risk management areas and of reporting to top-level management
- Adoption of a Business Continuity Plan*

*Plan that systematizes major operations across the entire company such that they can continue without suspension or can be brought back after only a brief suspension.

Komatsu's Relationship with the Environment and with Society

Komatsu considers "What Komatsu Can Do and What It Must Do" for the global environment and for society and promotes activities of the entire Komatsu Group to realize its vision.

Business Activities and Their Impact on the Environment

The Komatsu Group not only develops and supplies construction and mining equipment but also is involved in such fields as industrial machinery/vehicles and electronics. These business activities' primary areas of environmental impact are as follows.

- Consumption of energy, raw materials, and auxiliary materials during manufacturing
- Use of chemical substances in manufacturing processes and generation of substances of environmental concern
- Consumption of energy and auxiliary materials required for use of products and generation of substances of environmental concern as a result of consumption
- Generation of noise/vibration during use of products
- Generation of waste and substances of environmental concern at the disposal stage

The Komatsu Group, in recognition of the fact that its business activities affect a number of stakeholders, most notably the residents of the area surrounding its activity sites, is promoting activities that will reduce these environmental impacts.

The Komatsu Approach

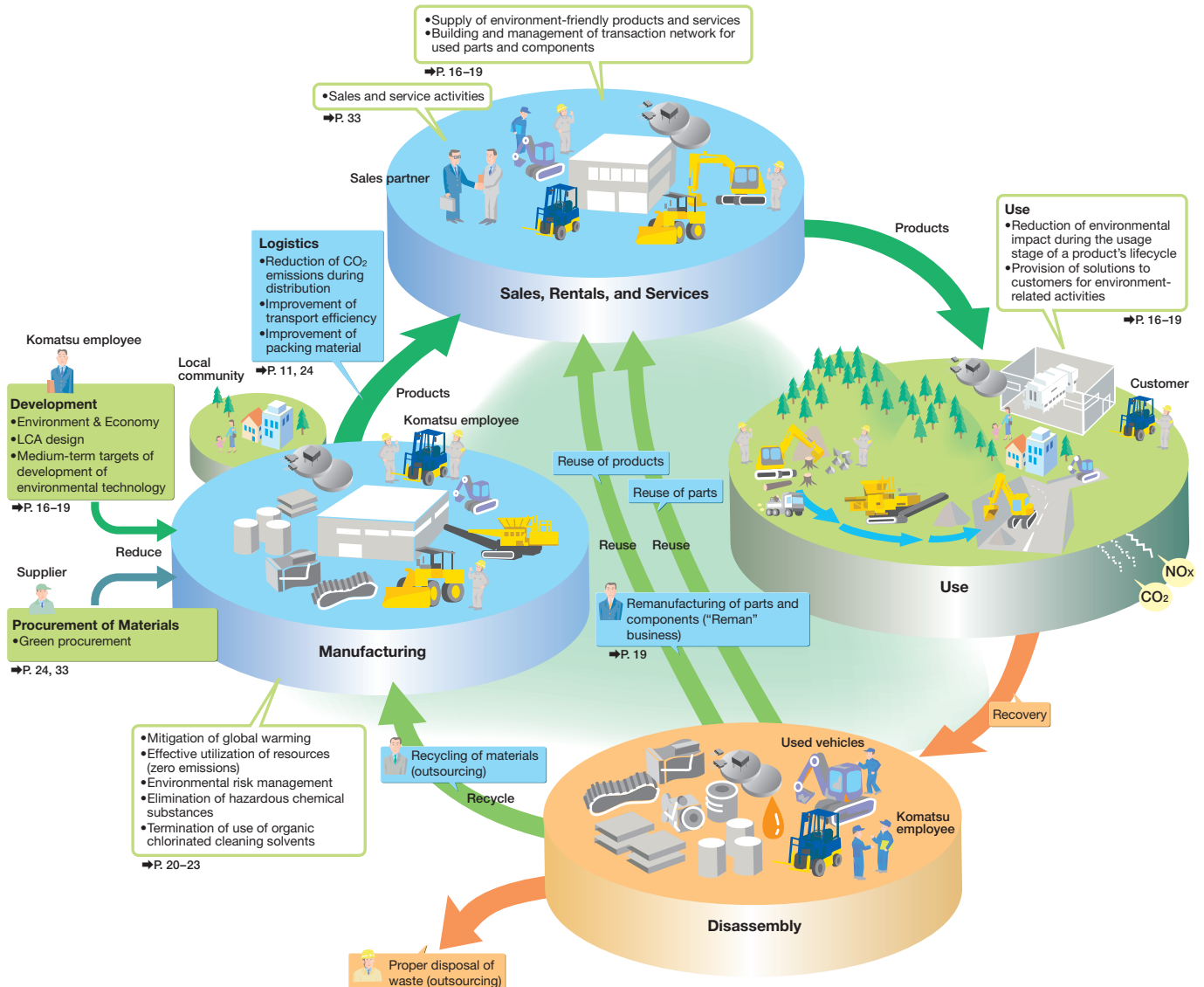
Komatsu established its Komatsu Earth Environment Charter in 1992. Then, with the philosophy of "What Komatsu Can Do and What It Must Do," Komatsu began pursuing the initiatives outlined in that Charter. Komatsu has focused its environmental activities chiefly in the construction and mining equipment field, which exceeds 70% of the Company's consolidated sales. As its primary initiatives, in addition to introducing an environmental management system based on ISO14001, Komatsu supplies products with environment-friendly designs and has been boosting its environmental performance.

In 2003, Komatsu undertook a revision of its progress to date, newly delineating the following as its corporate principles.

- Contributions to realization of a sustainable society
- Simultaneous realization of environmental and economic performance
- Observance of corporate social responsibility

Expanding the scope of its activities to all its areas of business, Komatsu is undertaking these initiatives throughout the entire Komatsu Group and at the global level.

The Komatsu Group's Business Activities' Relationship with the Environment and with Society



Komatsu Earth Environment Charter

Rooted in its vision for realizing a sustainable society laid forth in the Komatsu Earth Environment Charter revised in July 2003, the Komatsu Group seeks to promote activities that, from a more global viewpoint, reflect its awareness of its social responsibilities.

Komatsu Earth Environment Charter (July 2003 revision)

Corporate Principles

1. Contributions to Realization of Sustainable Society

The Komatsu Group recognizes conservation of the earth's environment for a sustainable society as among the most important tasks for mankind in the 21st century.

The Komatsu Group endeavors to contribute to this task by actively integrating environmental conservation into all of its business activities. The Komatsu Group reaffirms its long-term commitment to this effort as an important management priority.

2. Simultaneous Realization of Environmental and Economic Performance

The Komatsu Group is committed to improving both environmental performance and economic efficiency, as a group of companies working toward superior manufacturing for customer satisfaction. To this end, the Group constantly takes 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 seeks to be a respected corporate citizen of the host local community in nations around the world. Each company strives to fulfill its corporate social responsibilities, including compliance with applicable laws and regulations on environmental conservation, as well as voluntary involvement and participation in community programs to address environmental concerns, and through dialogue and coordination with regulatory authorities, local leaders, and the public. Each of the individual Komatsu Group companies is responsible for fulfilling its independent legal obligations.

Guidelines for Corporate Activity

1. Framework for Global, Group-wide Environmental Management System

- 1) Production facilities of the Komatsu Group, already with ISO certifications, will work to maintain and improve their environmental management system, while other production facilities, yet to be certified, will strive to acquire ISO certifications as soon as possible.

The Komatsu Group will also work to introduce and improve an environmental management system in all business domains other than production, and to implement a program of continuous improvement in environmental performance and in-house environmental auditing.

- 2) The Komatsu Environmental Committee develops environmental action plans for the Komatsu Group. Each division or affiliated company of the Komatsu Group is responsible for establishing its own mid- to long-term targets based on Group-wide action plans and for developing and implementing specific action plans.

The Komatsu Environmental Committee also develops common guidelines for an environmental manual for the Komatsu Group, and based on them, each division and affiliated company is responsible for providing for its own rules and procedures in accordance with respective circumstances.

2. Development of Products and Technology with Superior Environmental Quality and Economic Performance

- 1) The Komatsu Group seeks to develop and provide to customers superior products with world-leading environmental quality and economic performance. The Komatsu Group seeks to meet or surpass emission control performance and other environmental requirements applicable to its construction and mining equipment products. The Komatsu Group establishes common mid-range technology development goals for each business domain, and each development center is responsible for promoting the development of such technologies in a planned manner.
- 2) The Komatsu Group seeks to develop and provide superior environmental products and systems designed to offer customers optimal solutions in their environmental conservation efforts.

3. Promotion of Zero Emissions

- 1) The Komatsu Group works to facilitate Zero Emissions manufacturing at all of its manufacturing facilities worldwide by extending such activities as piloted and achieved at its manufacturing facilities in Japan.

The Komatsu Group also works to facilitate Zero Emissions and other environmental activities of its suppliers. To this end, the Komatsu Group seeks to expand its Green Purchase program and also offers technological support when suppliers may need to acquire ISO certifications.

- 2) The Komatsu Group promotes reduction of environmental impacts of its sales and product support activities. The Komatsu Group offers support to its distributor and affiliated rental companies in Japan by setting up model cases, providing environment-related information, establishing environmental management guidelines and undertaking other activities. For distributors and affiliated rental companies overseas, the Group also strives to extend similar activities, as appropriate considering their respective conditions.
- 3) The Komatsu Group works to improve life cycle assessment of its products and build a circulation-based business system designed to reduce environmental impact throughout product's life cycle.

4. Management of Environmental Risks and Observance of Corporate Social Responsibilities

- 1) Each division and affiliated company of the Komatsu Group is responsible for observing applicable environmental standards and regulations of the country or region where it is located as well as its own internal policies and standards, and working to improve its capability to anticipate and address environmental impacts.
- 2) The Komatsu Group promotes the consciousness of Group employees to the importance of environmental conservation and the responsibility of employees to fulfilling the Komatsu Group's commitment to this principle. To this end the Group also promotes education on environmental conservation for employees and special training for environmental management and auditing personnel.
- 3) The Komatsu Group promotes disclosure of information concerning its performance of environmental conservation activities. Each division and affiliated company of the Group promotes such disclosure as appropriate based on local circumstances.

Environmental Action Plan and Results for FY2004

Komatsu has formulated an Environmental Action Plan (implementation policies) in each field for the practical implementation of the Komatsu Earth Environment Charter. Komatsu specifies its operational targets every fiscal year and keeps checking yearly developments, facilitating establishment of a strong base to implement the Action Plan.

■ Environmental Management

Implementation policies	Objectives for FY2004	Results (Asterisks indicate results for FY2004)	Mid- and long-term objectives	Further information
1. Implement Environmental Action Plan	Draw up and promote the Plan	*Conduct internal environmental auditing *Held Second Global Environmental Affairs Meeting	Strengthening of sales- and service-related environmental activities Strengthening of overseas environmental activities	P. 12 P. 13
2. Environmental education and training: Implement the Plan	Draw up and promote the Plan	*Held nine lectures for over 2,000 attendees	Continuation of activities and extension of activities to overseas facilities	P. 13
3. Environmental communication: Publish an environmental report	Formulate and publish the communication plan	*Published an enlarged version of the report in June 2005 with enhanced coverage of environmental and social aspects	Reinforce quality of content; release report earlier than in previous years	All pages
4. Environmental accounting: Manage operations using standard indices for assessing environmental impact	Establish control with a standard set of indices in Komatsu Group facilities	*Compared the development of Komatsu's four manufacturing facilities by applying standard indices for assessing environmental impact	Lateral expansion to Group manufacturing facilities	P. 15

■ Research and Development

Implementation policies	Objectives for FY2004	Results (Asterisks indicate results for FY2004)	Mid- and long-term objectives	Further information
1. Reduce the environmental impact of construction equipment •Develop lower-emitting diesel engines •Proactively meet exhaust emissions regulations •Meet noise regulations	Take measures prior to enforcement of regulations	Have met EPA Regulations since 2001 and European and Japanese Tier 2 Emissions Regulations since 2002	Develop new diesel engines to meet Tier 3 Emissions Regulations to be put into effect in 2006	P. 16
•Develop environment-friendly construction equipment (GALEO series)	Develop bulldozer	*Develop small bulldozer D31PX/EX, D37PX/EX, D39PX/EX Improved productivity and fuel consumed by 10%; lengthened time between oil changes	Meet Tier 3 Emissions Regulations, which will take effect in 2006	P. 16
•Reduce environmental impact through applying information technology to construction equipment	Promote construction equipment information technology	Increase the number of vehicles equipped with construction equipment tracking system KOMTRAX *Develop construction method using information technology	Further expand the range of machines equipped with KOMTRAX Expand the application of construction using information technology	P. 17
•Meet mid-term objectives for development of environmental technology	Make progress via the GALEO series	Reduce substances of environmental concern by using lead-free radiators	Meet mid-term objectives for development of environmental technology	P. 16
2. Provide customers with solutions for their environmental protection activities •Promote on-site recycling using mobile recycling equipment	Expand scope of application of recycling engineering and promote social recognition of recycling engineering	*Promoted on-site recycling of construction residuals at point of generation by mobile recycling equipment	Expand range of machines in the mobile recycling equipment series; expansion of areas of applicability	P. 18
3. Promote reuse and recycling •Promote Reman business	Put developments into actual use	*Promoted its Reman business (remanufacturing used machine components) on a global basis Established Reman CSS-Net, a domestic transaction network for remanufactured components	Expand and promote Reman business	P. 19
•Reduce the environmental impact of Reman business •Acquire ISO14001 certification at Reman Centers	Acquired ISO14001 certification at one Reman Center	*Acquired ISO14001 certification at the Reman Center in Indonesia, for a total of four Centers acquiring certification out of seven Centers worldwide	Acquire ISO14001 certification by FY2006 at three of the remaining Centers	P. 19
•Recycle rubber crawler shoes	Study of recycling system	*Establish means of processing rubber crawler shoes through recycling (implemented by Japan Construction Equipment Manufacturers Association)	Establish recycling system through a nationwide recycling collector system	P. 19

■ External Commendations on Environmental Conservation and Social Activities and External Evaluations

● External commendations awarded in FY2004

Date	Name and content of commendation
January 2004	Certification by Mayor's Office of city of Kawagoe as an "eco-office": Komatsu Zenoah
April 2004	Foreign Minister's Commendation in Commemoration of the 150 th Anniversary of the US-Japan Relationship: Komatsu Latin America; Special adviser: Yoichi Kobayashi
June 2004	Silver medal, Pacific Flora 2004: Biodama (Komatsu Zenoah)
November 2004	The Security Analysts Association of Japan: Award for Excellence in Corporate Disclosure, Machinery division: Komatsu
May 2005	Japan Construction Mechanization Association: Incentive award for Tokyo subway/Komatsu, for efforts to reduce environmental impact during construction of subway line 13

● External evaluations conducted in FY2004

Nihon Keizai Shimbun newspaper:	Ranked 9 th out of 208 companies in Survey of Product Quality Management
Nihon Keizai Shimbun newspaper:	Ranked 3 rd out of 847 companies in Nikkei CSR Management Ratings
Nihon Keizai Shimbun newspaper:	Ranked 26 th in Nikkei PRISM (Private Sector Multi Evaluation System) evaluation of top companies in Japan
Nihon Keizai Shimbun newspaper:	Ranked 50 th out of 590 companies in Nikkei Environmental Management Ratings
Dow Jones Sustainability Index (DJSI):	Selected for listing in index (35 Japanese companies total)
Innovest Strategic Value Advisors rating of AAA	
Tohatsu environmental rating of A (30 companies earning A or above)	

■ Manufacturing

Implementation policies	Objectives for FY2004	Results (Asterisks indicate results for FY2004)	Mid- and long-term objectives	Further information
1. Environmental management system*: Encouraging Komatsu Group manufacturing facilities, including those overseas, to acquire ISO14001 certification by the end of FY2005	No plans for acquiring certification Undergo renewal review at 11 facilities	*Eleven facilities that acquired or renewed certification in FY2001 underwent renewal review; all 11 successfully renewed certification	Acquire ISO14001 certification by the end of FY2005	P. 13
2. Reduction of greenhouse gas emissions: •Make a 25% improvement by FY2010 in energy consumption per unit of manufacturing value from the level of achievement in FY1990 at Komatsu manufacturing facilities •Make a 13% improvement in energy consumption per unit of manufacturing value from the level of achievement in FY2000 by FY2010 at the Komatsu Group's domestic manufacturing facilities	Improve 1.5% year on year	*A 3.6% increase in emissions over the previous year. Improved 19.4% from the level of achievement in FY1990	Achieve by FY2010	P. 20
		*A 22.5% improvement over the previous year. Improved 17.5% from the level of achievement in FY 2000. (Excludes Komatsu Electronic Metals Co., Ltd.)	Achieve by FY2005	P. 20
3. Effective use of resources •Maintain or make further progress on attainment of zero emissions (Komatsu parent company to maintain its zero emissions; Group companies to attain by FY2005)	Increase number of facilities attaining zero emissions	*Accomplished recycling ratio of 99.5% across the entire Komatsu Group	Achieve by FY2005	P. 21
•Achieve a 50% reduction by FY2004 in the unit waste volume from the level of achievement in FY1990 at Komatsu manufacturing facilities and Komatsu Castex Ltd. Himi Plant	Implement action plans at a model manufacturing facility Extend the activities to other manufacturing facilities	*Accomplished a 51% reduction in the unit waste volume from the FY1990 achievement level	Accomplish further reductions	P. 21
•Achieve a 50% reduction by FY2005 in the unit waste volume from the level of achievement in FY1998 at the Komatsu Group's domestic manufacturing facilities		*Accomplished a 31% reduction in the unit waste volume from the FY1998 achievement level	Achieve by FY2005	P. 21
•Achieve a 30% reduction by FY2005 in unit waste processing costs from the level of achievement in FY2000 at the Komatsu Group's domestic manufacturing facilities		*Accomplished a 51% reduction in unit waste processing costs from the FY2000 achievement level	Accomplish further reductions	P. 21
•Achieve a reduction of greater than 5% by FY2005 in the volume of water consumed per unit of manufacturing value from the level of achievement in FY2002 at the Komatsu Group's domestic manufacturing facilities	Improve 1.5% year on year	*Accomplished a 16.9% reduction in the volume of water consumed per unit of manufacturing value from the FY2002 achievement level	Accomplish further reductions	P. 21
4. Environmental risk management •Implement voluntary reductions on the release of chemical substances Achieve a reduction of greater than 5% by FY2005 in the volume of substances released per unit of manufacturing value from the level of achievement in FY2002	Clarify the composition of chemical substances; reduce volume of released chemical substances	*Increased 28.0% over the FY2002 achievement level	Achieve by FY2005	P. 22
•Implement voluntary reductions on VOCs Achieve a reduction of greater than 50% by FY2006 in the volume of VOCs released per unit of manufacturing value from the level of achievement in FY2002		*In accordance with the FY2005 promulgation of laws related to the release of VOCs, reexamine measures for improving on reductions using assessments of the current situation based on measurements	Achieve by FY2006	P. 22
•Eliminate incinerators from the Komatsu Group's domestic manufacturing facilities	Dismantle two remaining incinerators	*Dismantled the two remaining incinerators at the Komatsu Group's domestic manufacturing facilities (completed one year ahead of schedule)		P. 22
•Implement permanent measures required to renovate underground tanks in service for 20 or more years by FY2001 (140 tanks renovated out of 144 tanks at the Komatsu Group's domestic manufacturing facilities)	Renovate two remaining tanks	*Renovated two remaining tanks, bringing the number renovated to 142 of 144 total	Renovate the two remaining tanks by the end of FY2005	P. 22

*Komatsu is responsible for setting overall direction for Komatsu Group companies regarding environmental management. Each subsidiary is responsible for the implementation of related policies and measures.

■ Procurement and Logistics

Implementation policies	Objectives for FY2004	Results (Asterisks indicate results for FY2004)	Mid- and long-term objectives	Further information
1. Green procurement •Promotion of improvements at suppliers through the establishment of environmental management systems and by specifying matters that require environmental consideration	Grasp suppliers' organizations for environmental management by means of Environmental Check Sheets.	*Environmental Check Sheet response rate was 100% among Komatsu "Midori-kai" group	Implementation of environmental management system of ISO14001 or an equivalent at suppliers by FY 2008	P. 33
2. Environmental conservation in logistics •Develop and commercialize Information Clearing House (ICH) system in domestic heavy material logistics beyond individual corporate frameworks •Rationalize logistics through electronic tagging	Promote increased transport efficiency through milk run and hub and spoke deliveries	*Attained a 81% truck loading ratio *Attained a 69% trailer loading ratio	In FY2006, attain a 85% truck loading ratio and a 75% trailer loading ratio	P. 24
	Participate in R&D project of METI (Ministry of Economy, Trade & Industry)	*By means of demonstration experiments, made it possible to see the degree to which processing through the supply chain has proceeded	Enable system to be put into practical use	P. 24

■ Sales and Services

Implementation policies	Objectives for FY2004	Results (Asterisks indicate results for FY2004)	Mid- and long-term objectives	Further information
1. Carry out occupational safety and health and environmental conservation activities at sales agencies and rental companies based on relevant guidelines	Formulate guidelines	*Formulate Occupational Safety and Health Guidelines and Environmental Guidelines for use by sales agencies and rental companies and then conduct activities on a trial basis	Extend activities to all sales agencies and rental companies based on Occupational Safety and Health Guidelines and Environmental Guidelines	P. 33

Business Activities and Environmental Impact

In addition to measuring quantitatively the relationship between business activities and the environment and understanding their environmental impact, Komatsu has formulated mid- and long-term objectives and is implementing measures that will reduce environmental impacts.

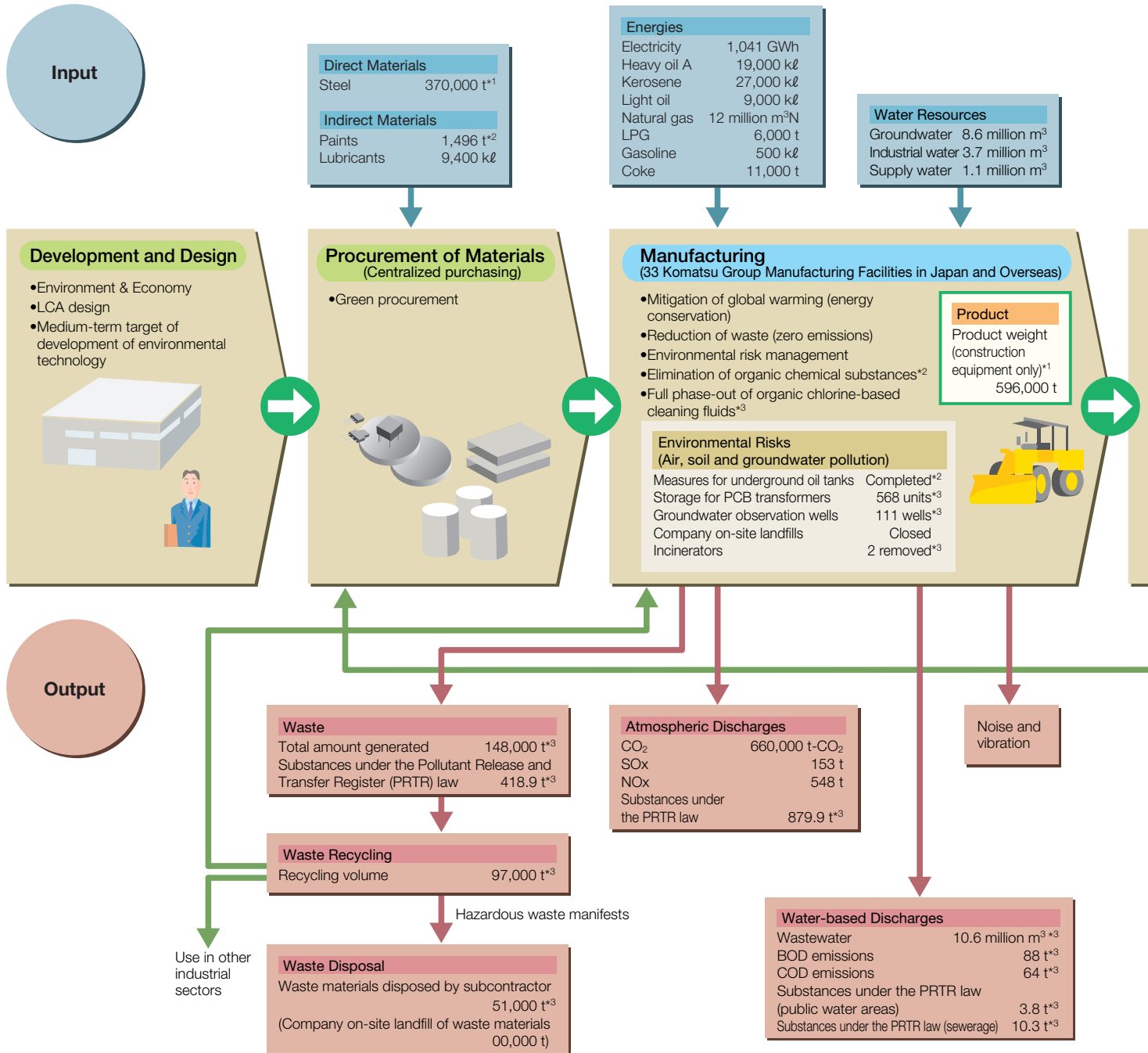
The Relationship between Business Activities and the Environment

The Komatsu Group procures various parts and materials and, through the manufacturing process, utilizes natural resources, including raw materials, water, energy, and chemical substances, among others, to provide products to its customers. Such business activities

result in environmental impact at each stage in the process.

The Komatsu Group will continue to provide more highly value-added products and services while at the same time it seeks to understand the environmental impacts resulting from its business activities, formulate its mid- and long-term objectives, and implement measures to reduce such impacts.

Environmental Impact Resulting from Business Activities of Komatsu Group Companies, including Overseas Facilities (FY2004)



CO₂ emissions: Figures for power and heavy oil (see Energy section of Input column) are calculated using the "CO₂ coefficient" in each area (in Japan, specified in the Ministry of the Environment of Japan's 1999 calculation guidelines based on the Law Concerning the Promotion of the Measures to Cope with Global Warming).

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

NO_x emissions: Calculated by multiplying the "nitrogen oxide emissions units" (obtained at each Komatsu facility) by the 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 volume of specific chemical substances released into the environment to promote the management of such substances.

■ Examples of Products Introduced to the Market in FY2004



Mini excavator PC20MR-2



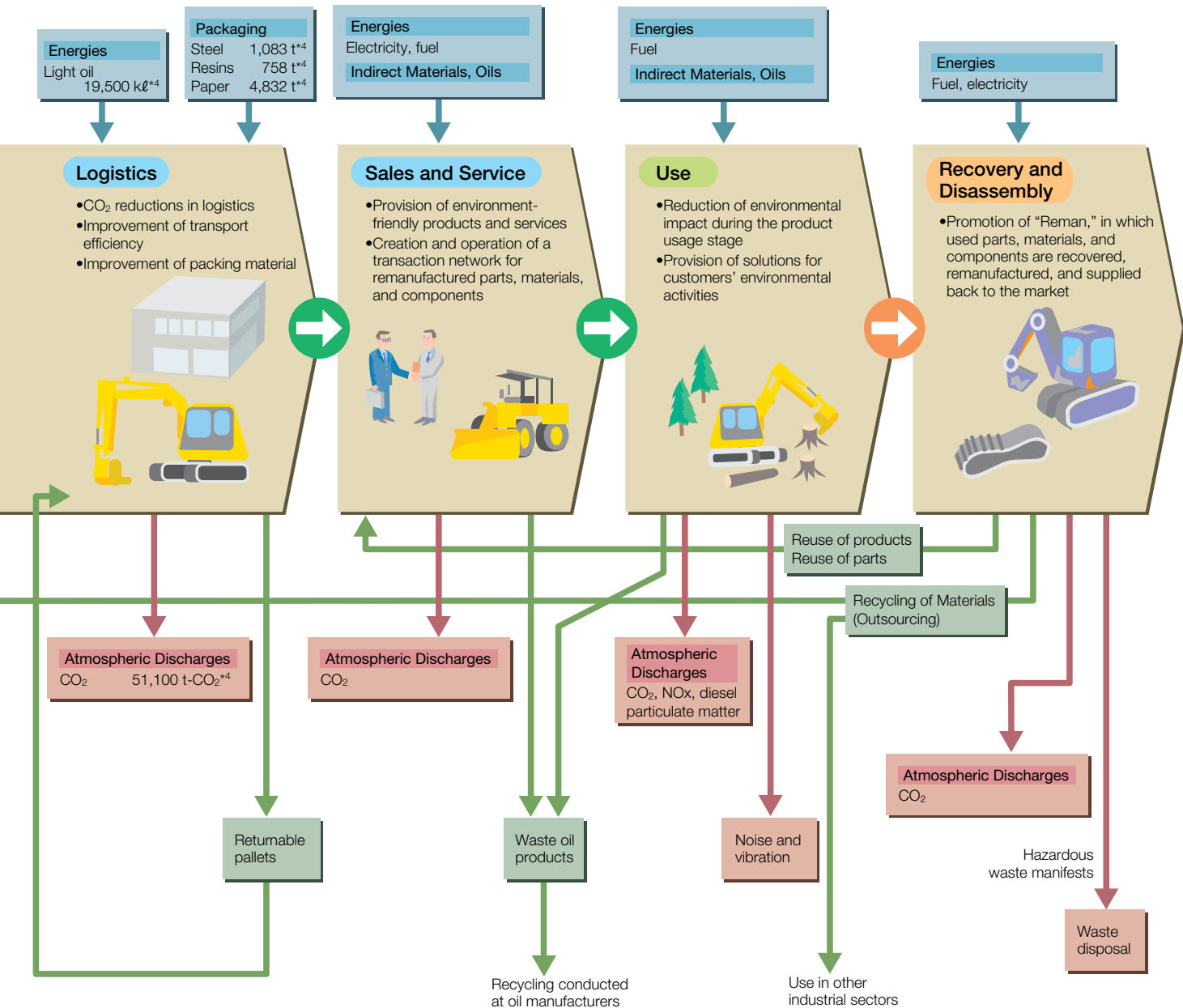
Bulldozer D31PX



Mobile crusher BR300S



Dump truck HD255



Coverage of Data

*1 Related to domestic construction machinery manufacturing (excluding Komatsu Zenoah)

*2 Komatsu manufacturing facilities

*3 Komatsu Group's domestic manufacturing facilities

*4 Logistics from procurement to sales related to domestic construction machinery

Environmental Management Structure

Komatsu has established an environmental management structure grounded in ISO14001 for its Group companies, including overseas manufacturing facilities. Also, as part of its efforts to fulfill its corporate social responsibilities, Komatsu conducts thorough environmental education for its employees.

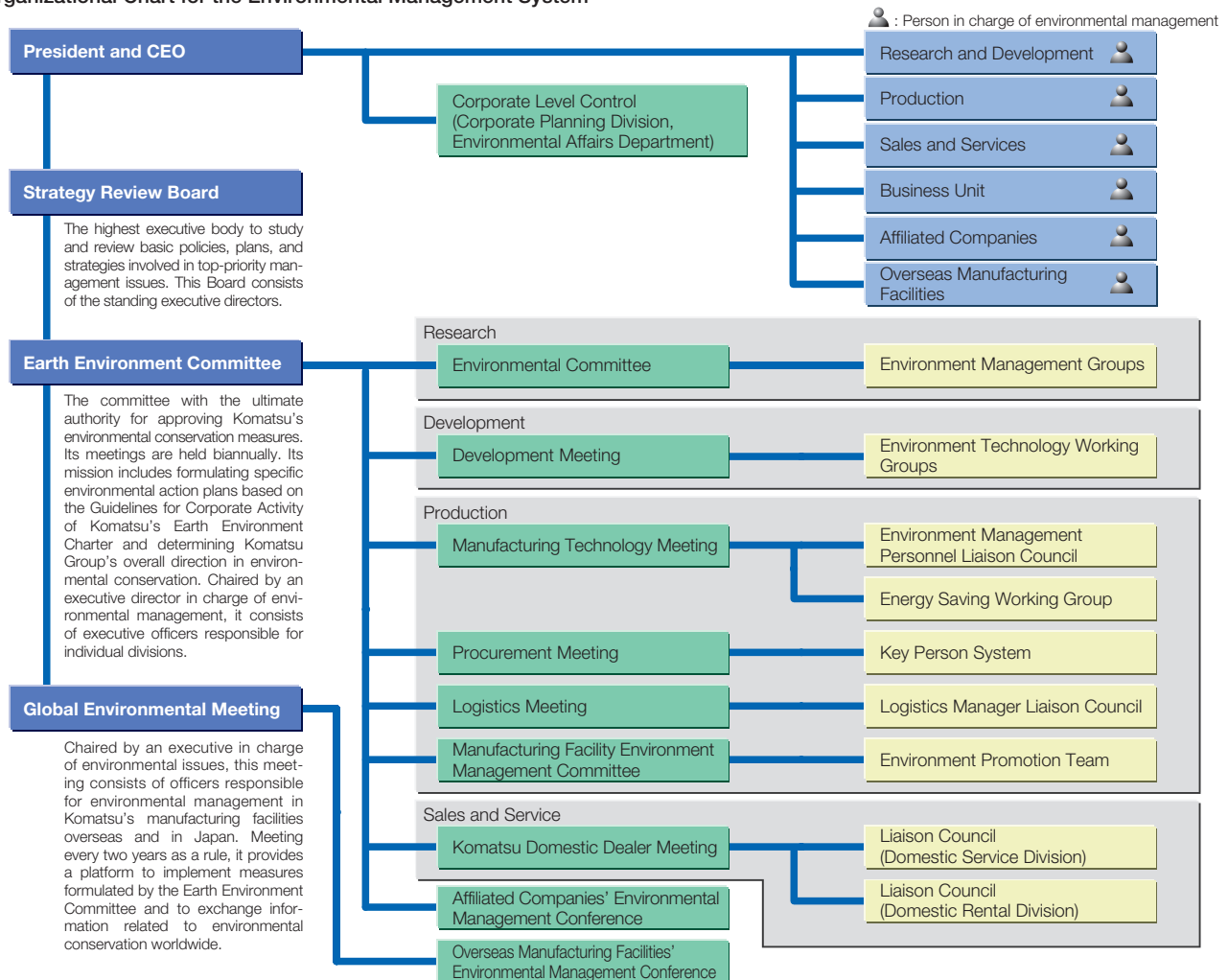
Overview of Environmental Management Structure

Komatsu Group recognizes that environmental issues are an integral part of its corporate mandate. As a cornerstone of this plan, it established the Earth Environment Committee in 1991 and created Komatsu's environmental management structure. Following this environmental initiative, it formulated the Komatsu Earth Environment Charter in 1992 and launched its environmental conservation activities.

The Strategy Review Board is responsible for matters related to corporate management while the Earth Environment Committee is in charge of examining individual policies. After the Earth Environment Committee formulates environmental policies, the executive officers of

the respective divisions and subsidiary companies are responsible for enhancing and applying these policies to meet their objectives in accordance with the functions of their own division or company. Further, an officer in charge of environmental conservation activities at each business unit implements these policies. When a policy includes important objectives, subcommittees of experts, so-called key persons, or working groups established in each division study them and work jointly with other divisions to develop solutions for environmental issues. In July 2003, the Environmental Affairs Department was established within the Corporate Planning Division to coordinate Komatsu Group-wide environmental activities.

Organizational Chart for the Environmental Management System



Environmental Auditing

Since FY1997, the Komatsu Group has been encouraging its Group companies to acquire ISO14001 certification. Through these efforts, all domestic manufacturing facilities acquired certification by FY2002.

With regard to environmental auditing, in accordance with ISO14001 stipulations, Komatsu conducts internal auditing as well as periodical review by external certification bodies. In addition, beginning in FY2004 the Komatsu Group launched internal environmental auditing, conducted by environmental experts from within the Group and focused primarily on environmental performance and legal compliance. Self-evaluations were conducted at each of the Komatsu Group's domestic manufacturing facilities, making use of the newly-created Komatsu

Environmental Risk Check Sheet. After that, internal environmental audits were conducted at the Awazu Plant, Osaka Plant, and Komatsu Electronic Metals Nagasaki Plant. In addition to pointing out areas for improvement, areas which would serve as points of reference for other facilities were assessed, thereby improving the level of environmental management and reducing environmental risk for the Group as a whole. The Group intends to visit all domestic manufacturing facilities for these internal environmental audits within the course of three years.

Apart from the above internal audits, the Komatsu Internal Audit Department implements business audits, including a review of the environment of each individual Group company, about every four years.

Second Global Environmental Affairs Meeting

From January 25–28, 2005, in order to promote environmental conservation activities on a global, Group-wide basis, the Second Global Environmental Affairs Meeting was convened at the Komatsu Head Office and at three domestic plants, sponsored by the Komatsu Earth Environment Committee.

Managers responsible for environmental management from 11 overseas subsidiaries as well as managers responsible for environmental affairs at domestic manufacturing facilities were joined in their discussions at times by the President and CEO, the Earth Environment Committee Chair, and environmental specialists from every aspect of Komatsu's business activities, including product development, manufacturing, procurement, and logistics. On January 25 and 26, participants made presentations on the status of their activities at the Head Office, and this was followed by an active exchange of views. On January 27 and 28, participants toured the Mooka, Oyama, and Osaka Plants in order to observe concrete examples of environmental conservation activities.

Environment meetings will in the future be held in the regions of the Americas, Europe, Asia, and China to consider what environmental conservation activities should be taken up globally. Komatsu will be creating a system in which environmental conservation activities are promoted through the cooperative efforts of the companies within a regional group.



Global Environmental Meeting

Environmental Education and Training

The Komatsu Group's fundamental education system distributes the responsibility for education such that the parent company develops educational materials and provides educational services on commonly relevant academic issues for use by Komatsu Group companies, whereas instruction regarding more hands-on matters, including unique features and points particular to individual business units, are conducted by relevant divisions in each business unit. With the exception of e-Learning undertaken by all employees, Komatsu conducted almost the same curriculum for environmental education and training in FY2004 as FY2003. E-Learning was incorporated into the curriculum for all newly-hired employees in FY2004.

■ Courses in Environmental Education in Japan (excluding general environmental courses)

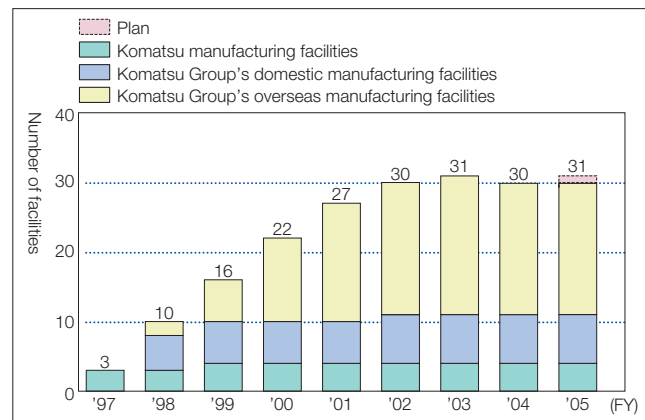
Venue	Course name	Target	Participants			
			FY2001	FY2002	FY2003	FY2004
Head Office	Advanced environmental education	Environmental specialists (Komatsu and affiliates)	0	0	17	0
	Overview of the ISO14000 series	Administrators (Komatsu, affiliates, and suppliers)	45*1	21	30	24
	Training of internal auditors	Environmental auditors (Komatsu, affiliates, and suppliers)	27*2	18	25	19
	Designing construction equipment (introductory and intermediate)	Development officers	105	251	89	59
	Introductory lecture on ISO14001	Administrators (suppliers)	N/A (integrated)	6 (from 5 companies)	0	2
	Commentary on environmental laws and regulations and environmental risk	Managers and environmental specialists (suppliers)	106 (from 77 companies)	6 (from 4 companies)	0	0
Administrative departments of plants	Basic environmental education	General managers and employees	222	413	169	784
	Overview of the ISO14000 series	General managers and employees	84	25	72	87
	Training of internal auditors	Environmental auditors	125	98	86	113
	Training new employees	New recruits	368	220	511	859
	Regulatory education and personnel exchange	General managers and employees	250	155	243	144

*1 Including 22 persons from 20 suppliers *2 Including 14 persons from 13 suppliers

ISO14001

To strengthen its systematic commitment to environmental conservation and improve the quality of its environmental management, Komatsu has made a Group-wide effort to acquire ISO14001 certification, an international standard. In FY2004, one of Komatsu's domestic affiliated companies (not a manufacturing facility) acquired ISO14001 certification. In addition, the 11 manufacturing facilities that acquired or renewed ISO14001 certification in FY2001 were subjected to a renewal review in FY2004. In FY2005, Komatsu will aim towards acquiring ISO14001 integrated certification for its four plants, as a first step towards acquiring ISO14001 integrated certification for the Group.

■ Current Status and Plan for Acquiring ISO14001 Certification (Manufacturing facilities)



The number of persons who have some environment-related certificate has far exceeded the minimum requirement. However, from the viewpoint of risk management, employees are encouraged to obtain a suitable certificate.

■ Number of Persons Having Environment-related Certificate

Certificate name	Number of persons with certificate			
	FY2001	FY2002	FY2003	FY2004
Pollution control manager	277 (60)	266 (60)	250 (60)	243 (60)
Energy manager	46 (15)	48 (11)	40 (11)	47 (11)
Environmental management system auditors	20	19	8	9

(Figures in parentheses indicate the number of officers required.)

Environmental Accounting

In order to bring about the greatest possible environmental performance at the lowest possible cost, Komatsu manages its environmental activities based on a standard set of indices. The company will be developing this concept to Group domestic and overseas manufacturing facilities as well.

Concept of Environmental Accounting

Komatsu began releasing environmental accounting data in FY1999 in order to manage ongoing and effective environmental conservation activities and disclose to its customers, shareholders, and all other stakeholders the content, cost, and effects of those activities. From FY2000, the company also began releasing this data regarding its overseas manufacturing facilities. The costs of environmental conservation are calculated in accordance with guidelines and manuals published by the Ministry of the Environment.

Environmental accounting is still in the developmental stages. In the future, Komatsu intends to monitor efficiently the costs and effects of environmental conservation in light of the life cycles of its products and build a new environmental accounting system that can be an effective tool for evaluating environmental management.

Costs and Environmental Effects of Environmental Conservation

At 1,471 million yen, Komatsu's domestic investment stayed at roughly the same level as the previous fiscal year, with the market environment having stayed solid, such as in North America, Komatsu's largest market, which experienced a significant increase, and in the rest of overseas markets, which all showed increases in sales except for the Chinese market. In particular there was an increase in investment in measures to control environmental impact in manufacturing facilities, including improvements in pollution mitigation and prevention equipment and energy conservation-related measures.

The company experienced an increase of 32% in total domestic expenses, with research and development having cost 12,949 million yen, compared to 9,837 million the previous year. This was a result of reducing the environmental impact and emissions of products, especially in the development of new products which meet the Tier 3 Emissions Regulations for diesel engines. As a result, the environmental conservation costs arising from R&D activities accounted for nearly 70% of the company's total costs. With regard to the business area

cost, Komatsu was able to reduce the cost of maintaining equipment through improvements in control efficiency and so on, but overall its manufacturing facilities experienced a 13% increase in costs compared to the previous year as a result of the costs involved with energy conservation-related measures, including fees for ESCO services, and greater amounts of waste to be disposed as a result of increases in production volume (waste processing fees).

These costs reflect expenses involved in surveys related to soil and groundwater contamination conducted at land tracts released by the company for sale as well as remedial countermeasures. Concerning the effects of environmental conservation, numerical data about the following items have been disclosed.

- (1) Environmental performance improvements that can be measured quantitatively
- (2) Net economic effects that contribute to earnings through cost reduction and avoidance and that can be directly measured in monetary terms

The effects of reducing the environmental impact of Komatsu's products during use and the non-economic effects of external activities are still being estimated.

Management Based on Environmental Impact Point*1 (EIP)

With the aim of obtaining maximum ecological benefit (environmental performance) with minimum economic cost (financial performance), Komatsu integrated a standard set of indices for assessment of all environmental impacts attributable to manufacturing facilities. This has made it possible not only to express quantitatively (numerically) such qualitative terms as "environment-friendly plant" but also to show clearly the progress of targets and efforts.

In addition, as a rational environmental impact assessment index (JEPIX)*2 well adapted to the actual conditions of environmental activities in Japan was developed, Komatsu decided to adopt this analytical technique in FY2002. In addition, in order to enable visualization and facilitate understanding of which process is generating what environmental impact, the analytical method known as the "material flow

Environmental Costs (Investments and expenses)

Top figure: Komatsu and Komatsu Group's domestic manufacturing facilities
Bottom figure: Komatsu Group's overseas manufacturing facilities (excluding L&T-Komatsu Limited)

Category	Investment			Expenses		
	FY2003	FY2004		FY2003	FY2004	
	Investment*1 (millions of yen)	Investment*1 (millions of yen)	Contents	Expenses*1 (millions of yen)	Expenses*1 (millions of yen)	Contents
(1) Business area cost	1,448	1,342		3,192	3,593	
	345	346		804	828	
1. Pollution prevention cost	653	712	•Installation and renovation of pollution mitigation/prevention facilities (conversion of effluent processing facilities, dust collecting equipment, etc.)	1,470	1,358	•Cost of maintaining equipment for mitigation/prevention of air and water pollution and for noise and vibration prevention (labor and depreciation costs)
	280	275		468	425	
2. Global environmental conservation cost	355	495	•Investment for implementing energy conservation measures, which include cogeneration systems and installing new ventilation systems	440	778	•Cost of maintaining energy conservation facilities, such as cogeneration systems (labor and depreciation costs)
	42	48		27	17	
3. Resource circulation cost	441	135	•Investment for reducing the volume of waste materials (establishment of resource recovery centers, installation of equipment for sludge dehydration, etc.)	1,282	1,456	•Waste materials processing cost
	24	23		309	386	
(2) Upstream/downstream cost	1	0		309	241	•Reduction of the environmental impact of materials to package components, etc. when shipping overseas
	14	12		139	60	•Reduction of the environmental impact of mass-production units
(3) Administration cost	10	16	•Investment in beautifying manufacturing sites	653	623	•Cost of maintaining environment management systems
	0	6		159	187	•Cost of creating green spaces and beautifying manufacturing sites
(4) R&D cost	83	112	•Investment in research facilities for reduction of environmental impact	9,837	12,949	•Cost of R&D activities to reduce the environmental impact of products
	0	0		720	266*2	•Cost of R&D activities to develop environment-friendly equipment
(5) Social activity cost	0	0		37	3	
	0	0		3	2	
(6) Environmental remediation cost	0	0		496	229	•Cost of conducting surveys and remedial countermeasures related to soil and groundwater contamination
	0	0		1	1	
Total	1,543	1,471		14,524	17,638	
	359	364		1,826	1,343	

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

*2 Environmental conservation cost involved in R&D cost includes only Komatsu UK Ltd.

network" was adopted in FY2003.

In FY2004, the level of management improved to a degree, as seen in the increase in the wastes undergoing thermal recycling and in the number of chemical substances being assessed. However, as Komatsu is aiming for plants with truly zero emissions, it will be considering improvements from an even greater number of perspectives in the future.

In FY2005 Komatsu intends to encourage its partner companies to use the newly-developed Simplified Spreadsheet for JEPIX Calculation and examine whether it can be used as an index for assessing green procurement.

*1 An integrated index of various environmental impacts

*2 The Environmental Policy Priorities Index for Japan, being developed at International Christian University as part of the 21st Century COE Program of the Ministry of Education, Culture, Sports, Science and Technology.

Evaluation of Indices

Komatsu made an attempt to integrate the environmental impact of operations at each of its manufacturing facilities, associate the values obtained with environmental accounting, and use the two indices shown in the diagram below to evaluate the degree to which indices

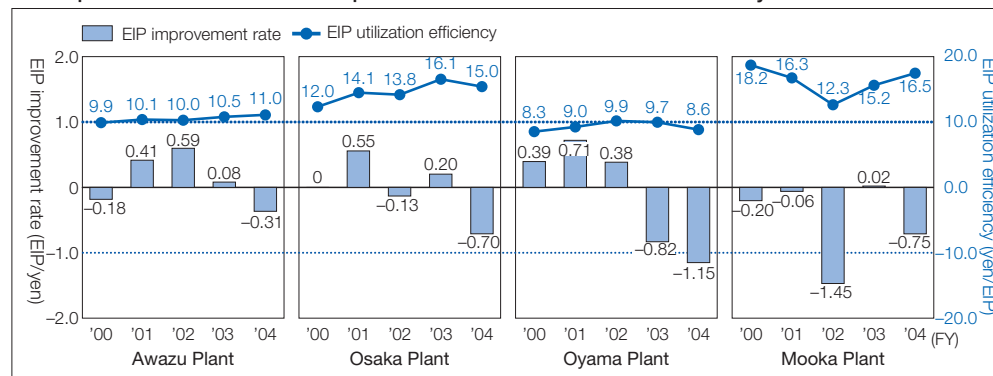
are being met for each of its manufacturing facilities.

As a result, it was found that the Awazu Plant was most effective in reducing its environmental impact in FY2004. However, such gains were unable to absorb the rising environmental impact resulting from increases in the volume of goods manufactured, and in fact every manufacturing facility saw a rise in environmental impact. In the future, a key issue will be how to lower total environmental impact even when there is a rise in production volume.

At the same time, the Mooka Plant obtained the equivalent value added (manufacturing amount) with the least integrated environmental impact. This is a result of vigorous energy conservation efforts since FY2003. From these facts, it follows that the Mooka Plant is the "most environment-friendly plant" when expressed in quantitative terms.

Komatsu considers it important to continue evaluating the degree of conformance to environmental standards set based on time-serial data obtained by using the two indices of overall environmental impact improvement efficiency and overall environmental impact utilization efficiency. In addition, Komatsu has plans to introduce this concept to the Komatsu Group's domestic and overseas manufacturing facilities in order to practice ecological business administration on a consolidated basis.

■ Comparison and Trend of EIP Improvement Rates/EIP Utilization Efficiency



EIP improvement rate:

- Effect of environmental impact reduction in relation to cost (EIP/yen) for environmental conservation activities, enabling us to measure the extent of environmental impact reduction for each monetary unit of 1 yen for environmental conservation activities.
- This enables Komatsu to assess the effectiveness of environmental conservation activities.

EIP utilization efficiency:

- Manufactured value in relation to the degree of environmental impact (yen/EIP), enabling us to measure the amount of monetary value added (manufactured value) in relation to the degree of environmental impact.
- This enables Komatsu to assess the environmental impact utilization efficiency rate directly related to business activities.

Cost of environmental conservation activities: costs + investment amounts - depreciation amount
EIP: Environmental Impact Point

*A FY2003 change in the software used to calculate improvement rates and utilization efficiency rates resulted in slight changes in data compared with the data released in FY2002.

■ Environmental Effects

Top figure: Komatsu and Komatsu Group's domestic manufacturing facilities
Bottom figure: Komatsu Group's overseas manufacturing facilities (excluding L&T-Komatsu Limited)

Environmental impact reduction effects			Economic benefits				
Items of environmental impact	Reduction volume (t/year)	Rate of year-on-year changes (%)	Tangible benefits		Avoidance benefits of environmental risks*2	Contribution to profits*2	
			Type	Monetary value*1 (millions of yen)			Major activities
CO ₂ emissions	-57,938	14.9	Energy conservation	353	•Introduction of cogeneration system	•There were no accidents or pollution in Japan during FY2004 that led to violations of the law. •No litigation costs were required in Japan during FY2004.	•Proceeds from mobile recycling equipment •Proceeds from value added due to reduced environmental impact of products (engines) •Proceeds from Reman business
	20,662	-9.4		31			
Water consumption	-125,201	1.1	Resource conservation	320	•Reuse of single-crystal silicon •Recycling of machining waste particles		
	906,935	-30.9		242			
Waste materials generation	-9,411	19.0	Waste materials reduction	28	•Promotion of recycling through thoroughgoing sorting		
	-5,244	13.1		18			
Gain on sale of valuables			Other	554	•Reuse of furnace slag for roadbed materials •Sale of silicon scrap		
				235			
			0	0			
			Total	1,255			
				526			

*1 Figures are rounded off to the nearest million yen.

*2 Komatsu used statements instead of numeral figures to describe the "Avoidance benefits 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 FY2004 are as follows:

- Mobile recycling equipment business: 11.6 billion yen (Mobile recycling equipment and recycling plant sales)
- Engine business: 54.3 billion yen (While engine sales are derived from Komatsu's overall construction equipment business, the engine sales here are those of the Engines and Hydraulics Business Division, including both intra-company and other intra-Group sales and sales to companies that do not belong to Komatsu Group.)
- Reman business: 17.9 billion yen (Worldwide Reman business sales from April 2004 to March 2005)

■ Effects on Society during the Product Use Stage*

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

Providing Products and Services that Coexist with the Environment

Komatsu provides optimal environment-friendly solutions through its safe and innovative products and services.

Environment & Economy

Komatsu's Environment and Economy means that it provides satisfactory solutions for both environment and economic activities by superior manufacturing technologies. Developing environment-friendly products must be done at competitive cost. Otherwise, these products cannot establish a presence in the market and will not contribute to reducing environmental impact. In FY2004, Komatsu implemented Environment and Economy by various developments including

- increasing rates of equipment operation through the use of KOMTRAX, and
- reducing time required for completion of construction through the use of information technology-based construction.

These resulted in increased user-friendliness as well as in reductions in CO₂ emissions.

Reducing Environmental Impact of Products

Life Cycle Assessment (LCA) Calculations

As general guidelines for reduction of the environmental impact of construction equipment, Komatsu set a three-item, medium-term target of development of environmental technology based on LCA (Life Cycle Assessment) in FY1999. In order to make the target fully understood and attained by the development division, Komatsu developed in FY2000 a computer program that facilitates assessing the level of environmental-friendliness of each model of construction equipment and uses it to determine the degree to which targets are being met through each new development.

CO₂ emissions reductions are progressing on schedule with regard to the amount of emissions per unit of operations (determined for each type of equipment) through the use of engines designed to meet emissions regulations, and Komatsu expects to meet its targets in this area. Regarding the recyclability ratio, in order to assess whether or not the target ratio would be met for counterweights in hydraulic excavators, in FY2004 Komatsu conducted a survey regarding end-of-life counterweights to determine the rate at which they were generated as well as means of recycling them. Finally, as for substances of environmental concern, the key to meeting these targets lies in reducing the use of lead solder, which accounts for some 80% of these substances. Komatsu will put further efforts into the use of aluminum radiators in order to meet its targets in this area.

Medium-term Targets of Development of Environmental Technology Based on LCA (set in FY1999)

Category	FY2005 target*	FY2010 target*
CO ₂ emissions	-5%	-10%
Recyclability ratio	97% or more	99.5% or more
Substances of environmental concern	-50%	-75%

*As compared with FY1998

Proportion of Lead-free Radiators in Use (in Komatsu Construction Equipment)

Current proportion	Future targets	
As of March 31, 2005	As of March 31, 2006	As of March 31, 2008
30%	55% or more	80% or more

Exhaust Emissions Regulations for Diesel Engines

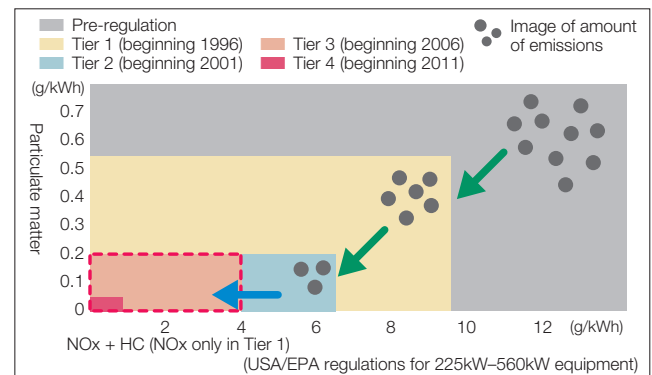
The diesel engines used in construction equipment are subject to regulations for exhaust emissions in the three regions of Japan, the United States, and Europe. As seen in the graph depicting U.S. emissions regulations as an example, increasingly stringent environmental

Major Achievements in FY2004

- 1 Expanded development of environment-friendly construction equipment (GALEO series)
- 2 Development of vehicles equipped with engines that satisfy the Tier 2 emissions standards for off-road diesel engines in Japan, the U.S., and Europe
- 3 Development of vehicles that satisfy noise and vibration standards in Japan, the U.S., and Europe ahead of dates mandated
- 4 Promotion of on-site recycling method by mobile recycling equipment
- 5 Expansion of efforts towards reuse and recycling

regulations come into effect at roughly five-year intervals, beginning with Tier 1 in 1996 up through Tier 4 in 2011. Tier 3 will begin in 2006, and products newly-developed to meet these standards will begin to enter the market soon.

U.S. Exhaust Emissions Regulations for Diesel Engines



Bulldozer D31PX/EX, D37PX/EX, D39PX/EX

In FY2001, Komatsu launched sales of the D31/37/39, which use a hydrostatic transmission (HST). In FY2004, the D31/37/39 series was developed, improving on the D31/37/39 HST vehicles. The new series utilizes electronic servo-controlled capability rather than conventional servo-less direct hydraulic control. These machines can provide maximum engine power to the sprockets under any operational conditions by means of a controller that regulates pump volume appropriately based on engine output (engine speed), external load (HST pressure), operating status of the lever, and so on. As a result, this series boasts a 10% increase in workload volume capability per unit fuel.

Furthermore, in addition to conforming to Tier 2 emissions regulations in Japan, the United States, and Europe, these bulldozers have a recyclability ratio of 99% and an engine oil replacement interval extended from every 250 hours to every 500 hours of use, making them environment-friendly bulldozers with lowered environmental impact.



Bulldozer D31PX

KOMTRAX

KOMTRAX stands for the Komatsu Tracking System, which uses state-of-the-art mobile communications technology and Internet-based technology to track from one's office such data for construction equipment as the current location, operating time, amount of fuel remaining, vehicle cautionary information, and replacement schedule for consumable parts. This is now a standard feature on domestically-produced small- and medium-sized construction equipment.

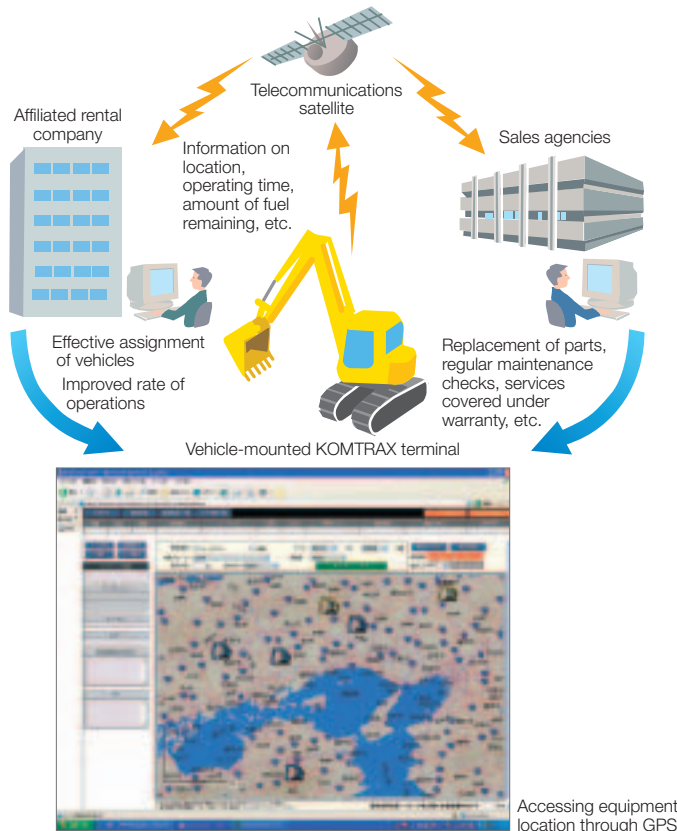
Features of Vehicle-mounted KOMTRAX Terminals

Vehicle-mounted KOMTRAX terminals collect as data (1) information on location using an internal global positioning system (GPS) receiver and (2) information from various on-board sensors and controllers. This is relayed to the Komatsu web server through satellite-based relaying or other means. The server stores the information received from each vehicle in a database and these data can then be accessed by customers, sales agencies, or affiliated rental companies.

Enabling Customers to Use Vehicles in their Optimum Condition

KOMTRAX enables customers to keep track of a vehicle's location, operating status, and condition. Using KOMTRAX makes it possible to receive advice regarding proper usage as related to maintenance timeframes, preventative maintenance, and more. Besides bringing peace of mind and reliability to its customers, Komatsu also (1) enhances the efficiency of construction operations by increasing rates of operation and (2) enables the effective use of resources through proper maintenance, allowing customers to use vehicles in their optimum condition at all times.

■ Overview of KOMTRAX



Information Technology-based Construction

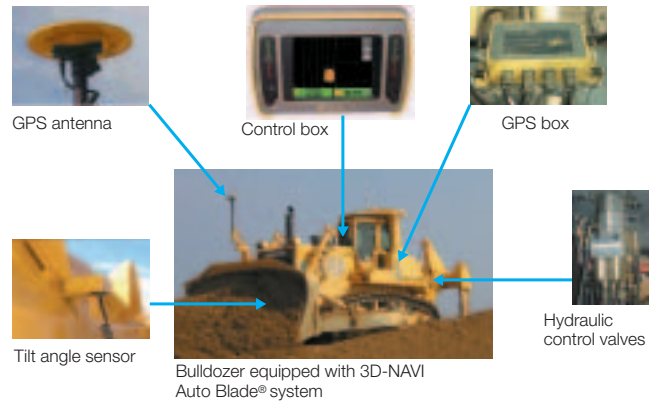
Komatsu and Topcom Corporation have developed jointly the "3D-NAVI Auto Blade®" system, an information-technology based construction system utilizing high-precision GPS tracking.

Features of the 3D-NAVI Auto Blade® System

The 3D-NAVI Auto Blade® system is a network computerized machine that renders construction projects to be implemented exactly as designed. Digital design data created by means of 3D-CAD technology are checked against the location data for the construction equipment as measured by RTK-GPS. The appropriate construction height from the ground is calculated and then the movement of the blade is controlled automatically. The position of the blade and its approach are verified by GPS and gradient sensors.

The use of leading frames and measuring during construction, as well as the corrective construction work that results, have all been unavoidable until now. However, by using this system, they are no longer needed, making possible a reduction in both costs and construction time. Moreover, the need for measurement-taking and work on leading frames done in the immediate vicinity of construction equipment disappears, increasing on-site safety.

■ Equipment Used in the 3D-NAVI Auto Blade® System



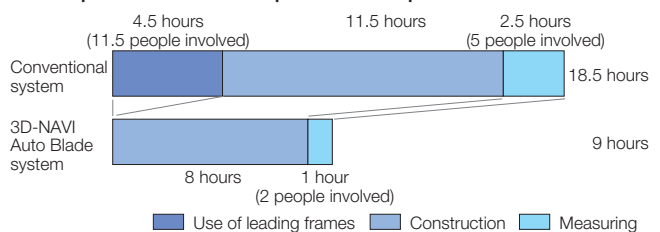
Construction Test Using 3D-NAVI Auto Blade® System

To compare information technology (IT)-based construction with conventional construction, a test was conducted in which banked terrain with a roughly 10% gradient was to be leveled to a 200m x 50m area with a drainage gradient of 1%.

In comparing the degree of accuracy*, the conventional method was off by 12cm, while the IT-based method was off by only 10cm. In addition, with regard to time required to complete the task, the IT-based method reduced construction time by approximately 50% compared to the conventional method. Because there was no need to use leading frames, measurement-related and other work was reduced by 6 hours. Furthermore, the time to create a level area with a 1% traverse gradient was reduced by 3.5 hours. Reducing the time required to complete construction makes it possible to enhance productivity while reducing environmental impacts, including those resulting from CO₂ emissions.

*Using a standard deviation of 3σ

■ Comparison of Time Required to Complete Construction



Completion of One of the Largest-scale Acoustic Testing Laboratories in the World

In order to strengthen its research on low-noise construction and mining equipment, Komatsu newly built an acoustic testing laboratory, equipped with the largest-scale anechoic chamber in the world, in the city of Hiratsuka in Kanagawa Prefecture. The testing laboratory just completed has anechoic chambers covering an area of 484 m², making it among the largest-scale chambers on earth. Komatsu is able to have any product among its entire domestically-manufactured lineup running inside this laboratory, and is thereby now able to make further progress on a variety of low noise-related research. In addition, the anechoic chambers feature the world's first movable partitions with acoustic absorption and sound insulation properties. By moving these partitions, the anechoic chamber can be made into a maximum of three rooms, enabling the testing of more than one piece of small- and medium-sized equipment simultaneously. This, in turn, significantly increases the efficiency with which new products can be developed.

Responding to the Need to Develop Low-noise Construction Equipment

Internationally, the need for low-noise construction equipment is increas-



Acoustic testing laboratory

ing. As one example, the Stage 1 regulations under the European Union Noise Regulations that came into effect in 2002 will be made more stringent in phases, with Stage 2 regulations coming into effect in 2006. In the future, Komatsu will make use of its new acoustic testing laboratory, developing construction machinery with unique and unrivaled low-noise capabilities rooted in its industry-leading noise-reduction technology.

Providing Solutions for Customers' Environmental Activities

Developing Products that Coexist with the Environment

Promotion of On-site Recycling Using Mobile Recycling Equipment

In response to the environmental challenges society faces, Komatsu provides environment-friendly products which coexist with nature as a high-quality and efficient solution created by optimum technology.

To its customers in civil engineering and the demolition industry, Komatsu provides a means of on-site recycling which processes residuals that are generated at construction sites. This on-site recycling allows for effective utilization of residuals so that they are not discharged as waste while enabling reduced impact to the environment, insofar as virgin materials do not need to be brought in. For these reasons, the mobile recycling equipment that enables this on-site recycling is being adopted at a large number of construction sites.

The mobile crusher BR380JG, in the market since 2003, receives high reviews from customers, on account of its large-capacity jaw crusher and fully automatic discharge setting adjustment system, which enable improved work capability and ease of operation. In addition to a model change to a mobile dual-axle shearer version, which is effective in reducing further the volume of mixed debris, FY2004 also saw the launch of sales of two types of mobile screens as peripheral equipment for the mobile crusher. Other environment-friendly products well-received by our customers include mobile tub grinders, mobile soil stabilizers, and mobile screens.

Mobile Dual-axle Shearer BR300S

The mobile dual-axle shearer BR300S, which enables significant mixed debris volume reduction, has been upgraded with a newer model, which features a Komatsu exclusive cutter. This cutter has a sharp cutting edge and is wear- and abrasion-resistant. What's more, it utilizes segmented cleaning "fingers" which help reduce the time needed for replacing the cutter. By arranging the intake hopper and outtake conveyor belt in opposite directions, the intake hopper is accessible from three sides for material loading, increasing operational efficiency.



BR300S

Mobile Screen BM883F, BM545S

The BM883F is a mobile screen capable of sifting aggregate into three sizes, developed for heavy-volume rock crushing and demolition work. Equipped with a steel apron feeder designed to withstand the impact of material loading, this mobile screen also utilizes finger screens on its upper deck to handle lightweight and sticky substances with ease.

The BM545S, a mobile screen with two-sized sifting capability, has a compact body that gives it great maneuverability while on site. Able to point its outtake belt in three directions to meet the needs of the construction site, this mobile screen also offers an adjustable setting for the angle of the screen to accommodate various types of aggregate to be sifted.



BM883F

Efforts for Reuse and Recycling

Promoting the Reman Business

The Reman business consists of remaking used machine components into components of the same quality as newly-manufactured ones by various processes and supplying them to the market. The Komatsu Group is promoting the Reman business at Reman Centers installed at seven of its operation bases around the world. "Reman," an abbreviated version of the word "remanufacturing," offers the customers the following benefits.

- The same quality and performance as those of new components are guaranteed
- The cost of a "remanned" component is lower than that of a new one
- A proper level of inventory of "remanned" components permits reducing the idle time of construction equipment
- The recycling and reuse of components helps save resources and reduce waste

Providing Reman-related Information

Within Japan, information on remanufactured components is made available via "Reman CSS-Net." Abroad, Komatsu has set up "Reman-Net," networking Reman Centers around the world. Komatsu is thus promoting its Reman operations at the global level and facilitating the active use of reused and recycled items.

Acquisition of ISO14001 Certification by Reman Centers

The seven Reman Centers around the world have been pursuing ISO14001 certification in order to promote environmental conservation. Four of the Centers have already acquired certification and the remaining three are aiming at acquiring it within FY2005 or FY2006.

Future Efforts

In order for expensive parts to be reused as much as possible, the Komatsu Group is making efforts to improve further its recycling-related technology, such as by increasing the number of parts restored to an ideal size and by developing parts designed exclusively for future use as remanufactured parts.

Recycling of Used Rubber Crawler Shoes

Rubber Crawler Shoes

Since about 1980, in order to protect the surface of paved roads, reduce traveling noise, and improve operator comfort, construction equipment featuring rubber crawler shoes has been developed. With the rapid increase in urban engineering, such as in sewer maintenance,

the use of these multipurpose wheel attachments has spread.

Because the conditions under which rubber crawler shoes are used are particularly harsh, they need to be replaced or maintained over a shorter cycle than the life of the construction equipment itself, and thus there are used rubber crawler shoes during each replacement or at the end of life for the construction equipment.

Rubber crawler shoes are comprised of steel cords providing tensile strength and supporting steel cords, which are overlaid by rubber. The weight ratio of these materials is 55 to 66% steel from the cords and 34 to 45% rubber from the overlay, and both of these are very valuable recyclable resources.

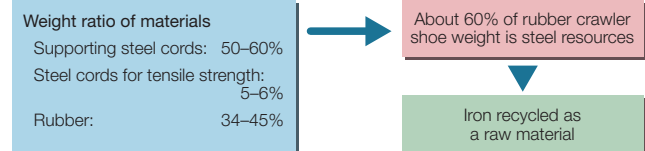
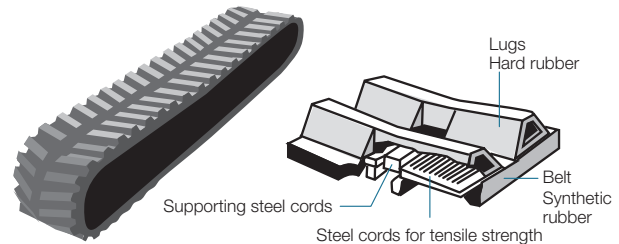
Difficulties in Recycling Used Rubber Crawler Shoes

Used rubber crawler shoes are found at sales agencies and repair yards, and they are associated with several problems, such as that (1) the shoes themselves are quite large and thus take up a great deal of storage space, and (2) industrial waste disposal fees are quite high. In response to this, Komatsu has promoted the recycling of these shoes through the operation of electric furnaces, through which the steel cords become iron resources and the rubber becomes a fuel source to provide heat.

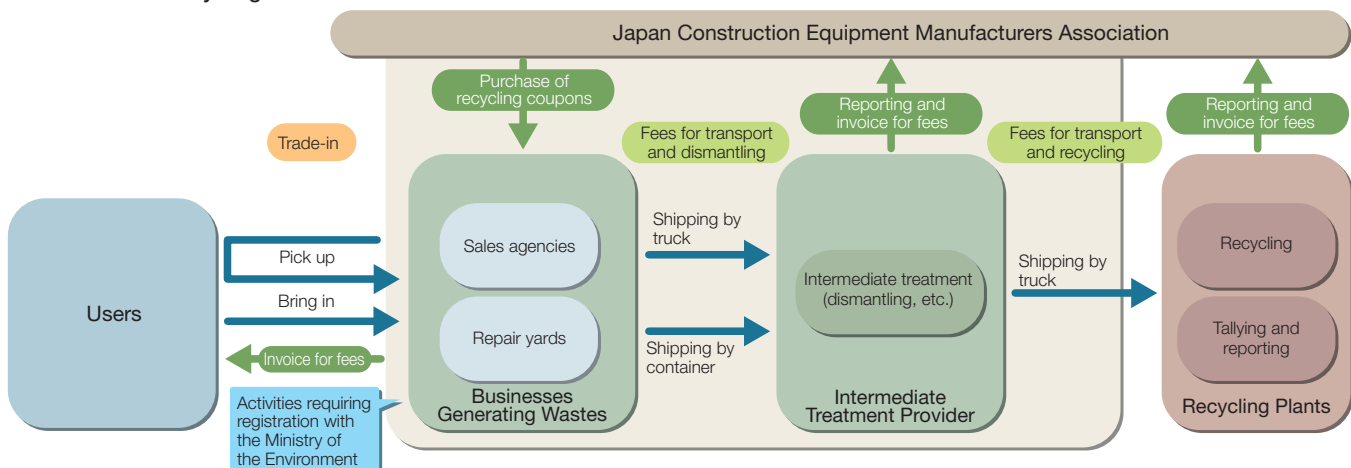
Future Plans

Within FY2005, Komatsu will be applying for authorization from the Ministry of the Environment as a nationwide recycling collector, aiming to establish a system for recycling used rubber crawler shoes.

■ Composition of Rubber Crawler Shoes



■ Processing Flow of Used Rubber Crawler Shoes, after Receiving Permission from the Ministry of the Environment as a Nationwide Recycling Collector of Industrial Waste Derived from its End-of-life Products



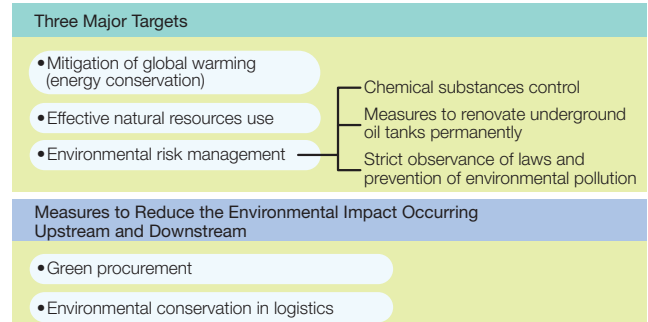
Environmental Conservation in Manufacturing Operations

Komatsu is undertaking efforts for energy conservation to mitigate global warming as well as pursuing zero emissions by utilizing waste as resources.

Environmental Conservation in Manufacturing Operations

Komatsu's manufacturing operations generate environmental impact through "input" to manufacturing, including the use of electricity and other forms of energy as well as various forms of natural resources, such as water and raw materials, and also through "output" from manufacturing, including air emissions, waste materials, and effluent. Based on this understanding, Komatsu plants are aiming to minimize environmental impacts from both input and output and Komatsu is actively committed to implementing environmental conservation activities at its manufacturing facilities. In addition, Komatsu is expanding this way of thinking into Komatsu manufacturing activities around the globe, thus resulting in global and Group-wide environmental conservation activities.

Targets for Environmental Conservation in Manufacturing



Mitigation of Global Warming (Energy conservation)

Basic Elements of Komatsu's Efforts

In order to mitigate global warming, Komatsu has worked out an index that converts electricity, fuel gas, fuel oil and any other type of energy consumed in its manufacturing operations into calorific value per manufacturing value. The company carries on its activities to save energy with a target of reducing energy consumption by 25% of the FY1990 figure by FY2010.

As a result, in FY2004, energy consumption was reduced by 19.4% of the FY1990 figure. However, compared to FY2003, FY2004 saw a much hotter summer and a significant further increase in production, resulting in greater use of energy for air conditioning. This led to an increase in energy consumption of 3.6% over FY2003.

At the same time, Komatsu was able to achieve a 9.1% decrease in total CO₂ emissions compared with the base year of FY1990.

Means of Improving Energy Conservation

As for energy conservation on the demand side, the manufacturing divisions are at the core of efforts undertaken, as depicted in the chart on the right. With Working Group activities, lateral development among all business units is taking place. As for conservation on the supply side, the utility administrative divisions are the main focus of implementation, and significant effects have already been achieved, in particular by means of the efforts for improvements in energy conservation planned since FY2001 through ESCO*¹ (Energy Service Company) operations, which have drawn particular attention recently.

Efforts Undertaken by the Manufacturing Division

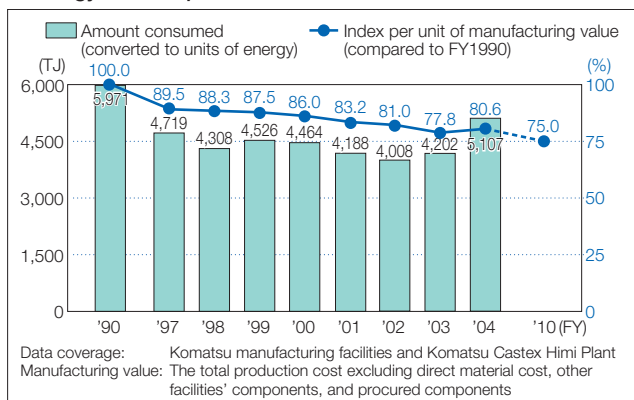
•Cutting stand-by electricity of manufacturing equipment
•Improving heat treatment method (micropulse-based heat treatment)
•Introducing inverter-controlled pumps and motors
•Painting plant roofs with heat-insulating paint
•Introduction of high-efficiency lighting
•Distributing compressors

Efforts which Incorporated ESCO Operations as the Main Activity

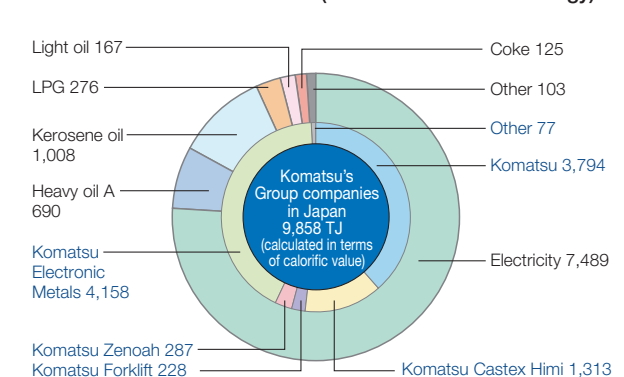
	Effort
FY2001	•Oyama Plant: Displacement air-conditioning equipment; gas turbine cogeneration
FY2002	•Awazu Plant: Absorption chiller cascade cooling, thermal recycling of cutting oil •Komatsu Zenoah Kawagoe Plant: Cogeneration •Komatsu Electronic Metals Nagasaki Plant: High-efficiency turbo freezer
FY2003	•Oyama Plant: Displacement air-conditioning equipment, high-efficiency lighting •Osaka Plant: Displacement air-conditioning equipment, high-efficiency lighting •Komatsu Zenoah Koriyama Plant: Cogeneration, displacement air-conditioning equipment
FY2004	•Awazu Plant: Cogeneration, displacement air-conditioning equipment

*ESCOs (Energy Service Companies) provide comprehensive services with regard to energy conservation in factories or buildings, enabling a realization of energy conservation while maintaining the same performance as before, and they guarantee that energy conservation effects will result from the measures they recommend.

Energy Consumption



Amount Consumed in FY2004 (converted to units of energy)



Data coverage: Komatsu Group's domestic manufacturing facilities

Effective Use of Resources

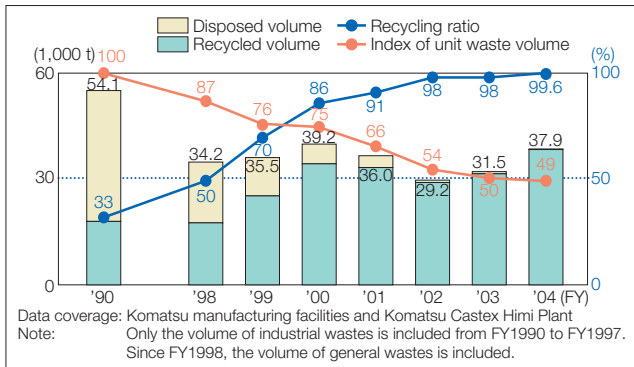
Measures for Dealing with Waste

In tandem with reducing the volume of waste materials at manufacturing operations, Komatsu concentrates on zero emissions* activities to recycle waste materials. As a result of Komatsu extending these activities to the Group's domestic manufacturing facilities, the Group as a whole attained a recycling ratio of 99.5% in FY2004. All domestic manufacturing facilities plan to achieve zero emissions by FY2005.

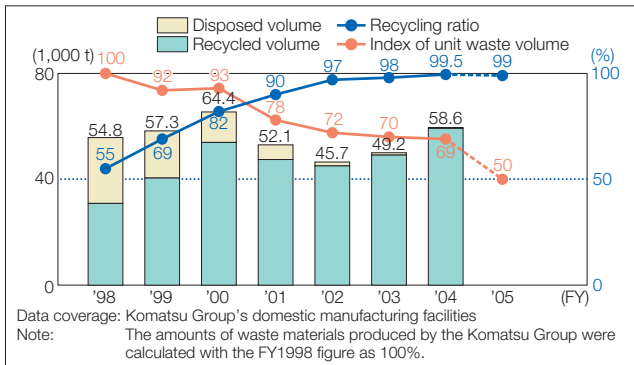
Reduction of Volume of Waste Generated

Concerning unit waste volume Komatsu has carried on activities to reduce waste volume to 50% of the FY1990 figure (of the FY1998 fig-

■ Volume of Waste Generated by Komatsu



■ Volume of Waste Generated by Komatsu Group's domestic manufacturing facilities



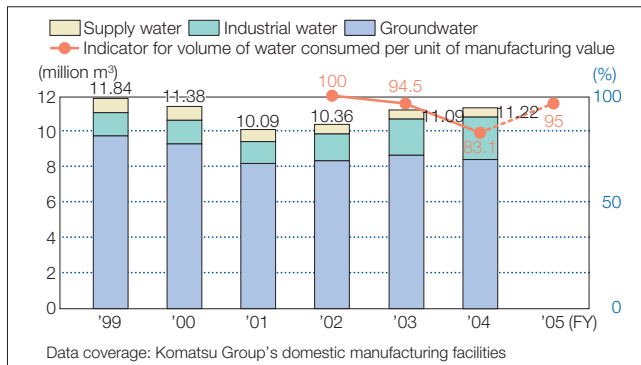
ure for the Komatsu Group) by FY2004 (by FY2005 for the Komatsu Group). The combined results of Komatsu manufacturing facilities and Komatsu Castex Himi Plant show that in FY2004, the volume of waste could be reduced by 51% compared to the FY1990 figure, resulting in attainment of the goal. While the Group as a whole has been able to reduce waste by 31% compared to the FY1998 baseline, it was unable to make significant reductions compared to the previous fiscal year. In addition, with regard to reducing waste processing costs, the Komatsu Group's domestic manufacturing facilities have established a target of reducing costs by 30% or more of the FY2000 figure by FY2005, and the company has already attained 51% reductions.

*Komatsu defines "zero emissions" as a waste material recycling ratio of 99% or more.

Conserving Water Resources

Since FY2003, Komatsu Group manufacturing facilities have been working towards a target of achieving by FY2005 a reduction of greater than 5% in the volume of water consumed per unit of manufacturing value from the level of achievement in FY2002. By practicing reuse during processing and by eliminating wasteful practices on a day-to-day basis, Komatsu was able to achieve 16.9% reductions compared with FY2002. Most notably, the Osaka Plant was able to cut in half the volume of water consumed per unit of manufacturing value through recycling wastewater as cooling water and water for toilets. With the introduction of equipment that recirculates cooling water, reuse during the processing stage will be carried out, enabling Komatsu to pursue water conservation even further.

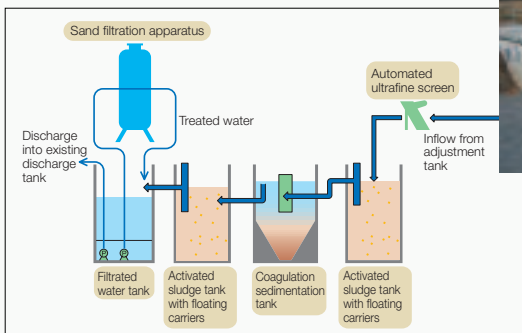
■ Volume of Water Resources Used by Komatsu Group's domestic manufacturing facilities



Conversion of Effluent Processing Facilities at the Mooka Plant

At the Mooka Plant, effluent processing facilities were converted upon the construction of a new dining facility for employees. It is now possible to conduct stable treatment of both effluent from industrial processing and non-industrial wastewater through the addition of an activated sludge tank with floating carriers and a coagulation sedimentation tank to the conventional treatment facilities for effluents from industrial processing. In addition, consumption of some 2,400 tons of water per month normally used during effluent processing has become unnecessary, contributing to conservation of water resources.

■ Overall effluent processing plant flowsheet, Komatsu Mooka Plant



Environmental Risk Management

In order to minimize the environmental risk that accompanies manufacturing activities, Komatsu is committed to acting in strict compliance with the legal framework stipulated by national and local authorities. In addition to thoroughly implementing pollution mitigation and prevention measures, Komatsu is making efforts to reduce the volume of chemical substances that it handles and uses.

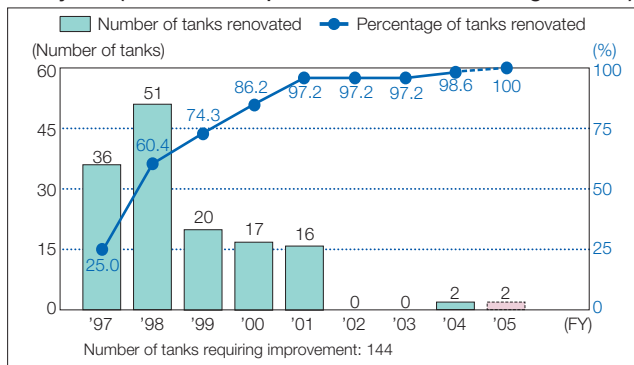
Compliance and Pollution Mitigation and Prevention

Komatsu positively implements periodic reporting of results of environmental measurement and keeping of measurement data in strict compliance with the applicable laws and regulations of the national and local authorities. In FY2004, the Komatsu Group experienced no environmental infractions or accidents in Japan.

Improvement of Underground Tanks

The replacement of existing underground tanks with above-ground tanks, the doubling of their tank walls, and the consolidation of underground tanks were carried out according to a plan. Of the 144 tanks in service for 20 years or more, 142 have already been subjected to improvements. The improvement of the remaining two tanks is planned to be completed by FY2005, with timing to be decided based on the manufacturing circumstances of the sites concerned.

Renovation of Underground Tanks in Operation More Than 20 years (Komatsu Group's domestic manufacturing facilities)



Elimination of Incinerators

Komatsu has been taking steady steps to close and dismantle its incinerators, emissions from which may include dioxins. Komatsu's domestic manufacturing facilities stopped using incinerators in FY1999 and dismantled them by FY2002. The Komatsu Group's domestic manufacturing facilities stopped using incinerators in FY2000 and dismantled all of them by FY2004. Komatsu has also confirmed that the concentrations of dioxins at the sites where two incinerators were dismantled in FY2004 are within the environmental standards set for soil.

Management of PCB Wastes

Komatsu conducts proper storage and management of PCB wastes from transformers and other such items in accordance with the Law Concerning Special Measures Against PCB Waste and the Waste Disposal and Public Cleansing Law. Komatsu has commissioned the Kitakyushu Office of the Japan Environmental Safety Corporation (JESCO) to treat its PCB wastes since December of 2004. However, in the future Komatsu plans to arrange for early treatment in regional facilities.

Soil and Groundwater Contamination

The Komatsu Earth Environment Committee has established guidelines for the investigation of soil and groundwater contamination in Japan. Namely, Komatsu investigates the condition of soil/groundwater contamination at business units that are planned to be sold, closed, or demolished and, if necessary, takes suitable measures under the supervision of the local authority concerned.

In FY2004, Komatsu conducted soil and groundwater decontamination of the site of the former Kawasaki Plant, which was to be sold, and a report on these treatment activities was submitted to the city of Kawasaki in Kanagawa Prefecture. In addition, Komatsu conducted soil contamination investigations at plants currently in operation to check for contamination by organic chlorine-based chemical compounds, which had in the past been used in cleaning solvents and otherwise. In FY2004 gas investigations were conducted on surface soil at three business units. In FY2005, boring-based investigations

will be carried out at locations at which a high gas concentration was detected, and investigations will also be held at other business units.

Chemical Substance Control

The enforcement of the Pollutant Release and Transfer Register (PRTR) Law*1 obligates industrial plants to, on an annual basis, keep track of the amounts of Type 1 specified chemical substances released and transferred and file notice with the authorities. The reporting obligations changed in FY2003 to cover substances handled in quantities of 1 ton or more. However, Komatsu has been supervising the management of all relevant substances, even when quantities handled are less than 1 ton.

State of Chemical Substance Control in FY2004

With regard to the consumption of paints, which result in a substantial portion of emissions volume, Komatsu and Komatsu Group manufacturing facilities were able to reduce the amounts of discharge of xylene, toluene, and other substances by switching to chemical substances that government authorities have identified as posing less environmental risk. However, as a result of a significant increase in production volume, there was also an increase in the amount of substances used, particularly paints. This led to an expansion of the volume of emissions into the air of substances covered under the PRTR.

The Komatsu Group will continue to undertake efforts to reduce the amount of environmental impact through improvements toward the control of such substances, mainly through the reduction of VOC*2 emissions.

Komatsu's Guidelines for the Control of Chemical Substances

In order to develop products that take the environment fully into account and reduce environmental risk, Komatsu is implementing comprehensive control of chemical substances by means of the *Komatsu Guidelines for the Control of Chemical Substances*.

Based on the established criteria for risk assessment, Komatsu has classified chemical substances subject to supervision into the three ranked categories of

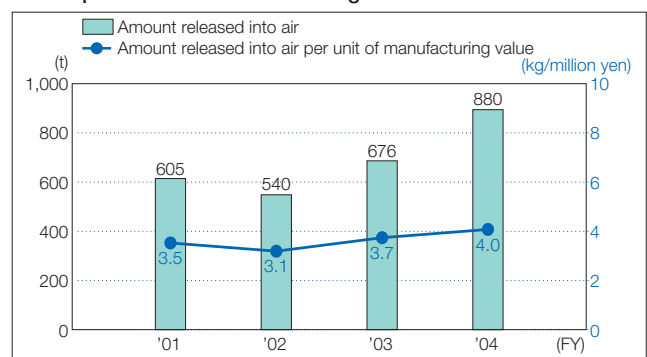
- prohibited substances: 714 types
- substances to be reduced: 1,239 types
- substances to be controlled properly: 1,444 types

and is controlling the amounts of release and transfer of each individual chemical substance.

At the end of FY2003, in order to implement these guidelines, Komatsu introduced a Chemical Substance Management System, including to its affiliated companies. In FY2004, by the use of this management system, Komatsu was able to improve its ability to prevent environmental pollution by means of environmental impact assessments conducted in advance.

In FY2005, Komatsu will be taking further steps to make full use of this system, reducing the amount of chemical substances handled and released.

Changes in the Amounts of PRTR-related Substances Released into the Air at Komatsu and the Komatsu Group's Domestic Manufacturing Facilities



Reductions in Release of VOCs

With regard to the VOCs found in paints, which account for over 90% of the volume of chemical substances released by Komatsu, significant reductions were achieved by changing the system for painting from a base coat/top coat dual-coat method to a system using single-coat paints that deliver the same performance through only one application. However, insofar as regulations concerning the release of VOCs are expected to become law in FY2005, further revisions have been deemed necessary. Komatsu has established a challenging target of achieving by FY2006 a 50% reduction in VOC releases per unit

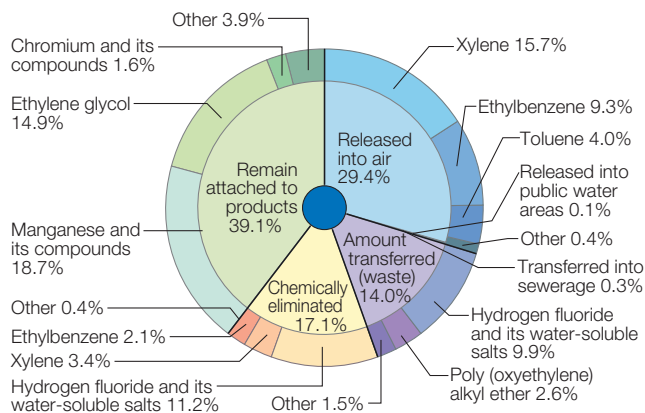
of manufacturing value vis-à-vis a FY2002 baseline and is now undertaking efforts to attain that target.

Forthcoming improvements will include conversion to high-solid type paints (to reduce the amount of VOCs contained therein), increasing coating efficiency, introduction of emissions control equipment, and conversion to water-based paints.

*1 PRTR Law: Law Concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management

*2 VOC: Volatile Organic Compounds (primarily paint solvents)

Breakdown of the Amount of PRTR-related Substances Released and Transferred



Data coverage: Substances handled in quantities of 1 ton or more at Komatsu Group's domestic manufacturing facilities



Equipment at Awazu Plant to process VOCs in emitted gases

Names of Class I Designated Chemical Substances and the Volumes Released and Transferred (Handled volume of 1 ton or more) (Unit: tons)

Komatsu's and Komatsu Group's manufacturing facilities										
Number under the PRTR Law	Name	Volume handled	Volume released				Volume transferred		Chemically transformed or eliminated	Volume contained in products
			Air	Water	Soil	Buried	Sewerage	Disposed		
63	Xylene	812.3	469.1	0	0	0	0	3.2	100.8	6.1
283	Hydrogen fluoride and its water-soluble salts	647.0	0.4	3.5	0	0	10.1	295.5	336.1	0
311	Manganese and its compounds	573.8	0.8	0	0	0	0	10.8	0	560.0
43	Ethylene glycol	447.3	0	0	0	0	0	1.0	0.0	446.3
40	Ethylbenzene	345.5	278.2	0	0	0	0	0.5	61.7	1.3
227	Toluene	166.8	120.9	0	0	0	0	5.3	10.3	9.1
307	Poly (oxyethylene) alkyl ether (alkyl C=12-15)*	76.9	0	0.3	0	0	0.2	76.4	0	0.0
68	Chromium and chromium (III) compounds	48.7	0	0	0	0	0	2.0	0	47.0
346	Molybdenum and its compounds	33.8	0.0	0	0	0	0	0.1	0	33.7
231	Nickel	25.0	0	0	0	0	0	1.2	0	23.9
69	Chromium (VI) compounds	19.9	0	0	0	0	0	10.5	0	9.2
224	1,3,5-trimethylbenzene	17.7	9.2	0	0	0	0	0	1.2	7.1
198	1,3,5,7-tetraazatricyclo (3.3.1.1 ^{3,7}) decane; hexamethylenetetramine	12.3	0	0	0	0	0	0.2	0	12.0
266	Phenol	11.4	0.1	0	0	0	0	0	0	6.8
16	2-aminoethanol	6.8	0	0	0	0	0	6.8	0	0.0
100	Cobalt and its compounds	4.7	0	0	0	0	0	0.4	0	4.3
132	1,1-dichloro-1-fluoroethane (HCFC-141b)	2.9	0.7	0	0	0	0	2.2	0	0.0
30	Bisphenol A type epoxy resin (liquid)	2.9	0.4	0	0	0	0.0	1.5	0	1.0
243	Barium and its water-soluble compounds	1.9	0	0	0	0	0	0	0	0
25	Antimony and its compounds	1.8	0	0	0	0	0	0.5	0	0.6
232	Nickel compounds	1.6	0	0	0	0	0	0.4	0	0.6
299	Benzene	1.4	0.0	0	0	0	0	0	0	0.7
310	Formaldehyde	1.1	0	0	0	0	0	0	0	1.1
230	Lead and its compounds	1.0	0	0	0	0	0	0.3	0	0.7

*Limited to substances whose alkyl group has carbon number 12 to 15 and any mixtures of those substances.

Activities for Reducing Environmental Impact from Upstream/Downstream Operations

In keeping with the company's Environmental Action Plan for Procurement, Komatsu conducts green procurement. It also continues to promote improvements in transport and packaging, bringing about greater efficiency in manufacturing and logistics through state-of-the-art technology such as electronic tags.

Green Procurement (Office supplies)

Stationery Items

Even as it expands its use of items with eco-label items or recognized as eco-friendly by the Green Purchasing Network*, Komatsu has implemented restrictions on purchasing by means of a new Komatsu Procurement System (KOPS). By FY2005, the number of stationery items approved for purchase will be limited to 1,000.

*A nationwide network in Japan comprised of companies, government bodies, and consumers for eco-friendly purchasing.

Toner Cartridges

Komatsu has selected a manufacturer that produces toner cartridges that can be recycled. In the future the company will shift to recyclable

items as well as change from office equipment models that cannot use recyclable cartridges to models that can use them.

Copy Paper

Komatsu promotes use of copy paper that is 100% recycled. However, in FY2004, the proportion of 70% recycled paper exceeded that of FY2003, with 11,294 thousand yen worth having been purchased, representing 63% of total copy paper purchases. In the future, Komatsu will promote a shift from 70% recycled paper to 100% recycled paper. Komatsu already prohibits the purchase of virgin paper.

Environmental Action Plan for Procurement

Item	Amount purchased in FY2004 (thousand yen/year)	Total no. of items purchased	Results from FY2004				Plan for FY2005				Plan for FY2010			
			Green procurement items				Expansion plan for green procurement items				Expansion plan for green procurement items			
			Amount purchased (thousand yen/year)	%	No. of items	%	Amount purchased (thousand yen/year)	%	No. of items	%	Amount purchased (thousand yen/year)	%	No. of items	%
Stationery items, office supplies	11,150	1,542	7,858	70%	802	52%	8,500	76%	850	85%	9,000	81%	900	90%
1,000 items approved for purchase														
Toner cartridges	22,880	144	5,406	24%	34	24%	7,000	31%	35	50%	10,000	44%	35	50%
70 items approved for purchase														
Copy paper	18,100	21	2,567	14%	4	19%	6,000	33%	6	67%	8,000	44%	6	67%
9 items approved for purchase														
Total	52,130	1,707	15,831	30%	840	49%	21,500	41%	891	83%*	27,000	52%	941	87%*

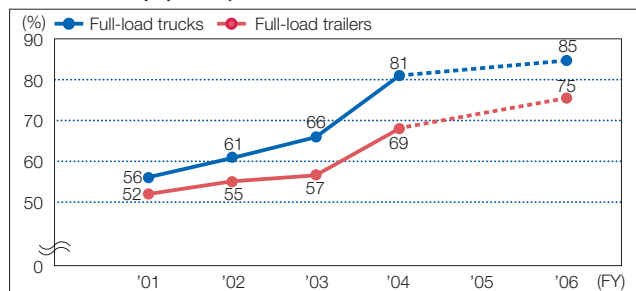
*The change in the number of items approved for purchase resulted in modifications to the procurement plans.

Environmental Conservation in Logistics

Ongoing Activities to Improve Logistics

Komatsu is enhancing transport efficiency during the procurement of parts through "milk run" deliveries (pickup of items via circuit-type routes) or "hub and spoke" deliveries (arterial deliveries between points). When transporting finished products, in order to overcome the conventional difficulty of utilizing vehicles for transporting heavy cargo in both directions of a round-trip, Komatsu has identified partner companies with which it undertakes transport jointly, resulting in a jump in full-load round-trip efficiency. In the area of packaging, Komatsu has established levels of attainment for packaging simplification (resource conservation) and improvement in operations efficiency (energy conservation) and evaluates and revises its plans on an item-by-item basis.

Change in Full-load Trucks and Trailers (for transport of construction equipment)



*Full-load ratio = number of loaded runs/total number of runs

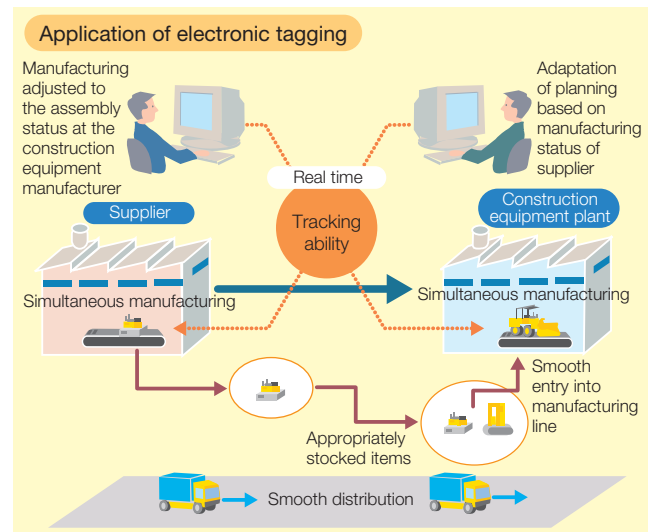
Use of Electronic Tags in the Supply Chain

In the supply chain, comprised of the parts suppliers and the assembly plants, overstocks, delays, defects, reschedulings, and other types

of inefficiencies in operations occur when differences arise between manufacturing plans and actual manufacturing volume. In order to improve efficiency, in FY2004 Komatsu began participating in the 2004 Electronic Tag System Development Study for Streamlining Energy Usage conducted by the Ministry of Economy, Trade and Industry.

Through electronic tagging it is possible to see the degree to which a part or a product has been processed in the supply chain by means of matching the information with the item itself, and collecting information on an item's status in real time. In this way it has proven itself to be useful in improving efficiency in the system. Based on these results, from FY2005, Komatsu will be taking steps to implement this system on essential parts.

Concept of Electronic Tagging



Environmental Activities of Overseas Manufacturing Facilities

Each of the Komatsu Group's overseas manufacturing facilities, in recognition of the effects its activities have on the environment, promotes activities that minimize environmental impacts.

Komatsu America Corp.

Company Overview

Headquartered in the state of Illinois, U.S.A., Komatsu America has four manufacturing operations: the Chattanooga Manufacturing Operation in Tennessee, U.S.A., the Candiatic Manufacturing Operation in Quebec, Canada, the Peoria Manufacturing Operation in Illinois, U.S.A., and the Newberry Manufacturing Operation in South Carolina, U.S.A. The company conducts the development, manufacture and sale of construction and mining equipment as well as overall business operations for the Americas.

Environmental Conservation Activities

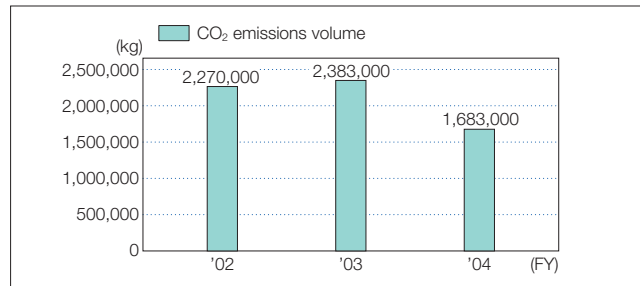
In addition to conducting environmental conservation activities at each manufacturing operation, Komatsu America undertakes an external environmental audit twice every year.

1. Energy conservation project (Candiatic Manufacturing Operation)

The Candiatic Manufacturing Operation launched an energy conservation project in October 2004. Its main features include:

- (1) Automation of heating, air-conditioning, ventilation, and lighting equipment
- (2) Equipment controlled remotely by a specialized firm
- (3) Direct information on website concerning temperature and air quality (CO₂ & NO emissions, etc.)
- (4) Purchase of new equipment to improve existing heating systems

Change in CO₂ Emissions Volume



2. Reuse of second-hand wood (Candiatic Manufacturing Operation)

Wood taken from used pallets and containers is provided for reuse as construction materials for home furnishings. In only one year, the Candiatic Manufacturing Operation has provided its employees with an average of 16 metric tons of wood per month (200 MT per year).



Home furnishings made from reused wood

Example of Social Contributions

The Chattanooga Manufacturing Operation collects used drink beverage containers and donates its proceeds to charity.

Hensley Industries, Inc.

Company Overview

Hensley Industries is based in Texas, U.S.A. and manufactures and sells buckets, teeth, edges and adapters for construction and mining equipment.

Environmental Conservation Activities

The company recently erected a fence at its plant, which is located near a creek, to prevent water from the plant grounds from flowing into the creek during heavy rains. In FY2005 the company plans to acquire ISO14001 certification.



Fence to prevent rainwater from flowing into the creek

Komatsu do Brasil Ltda.

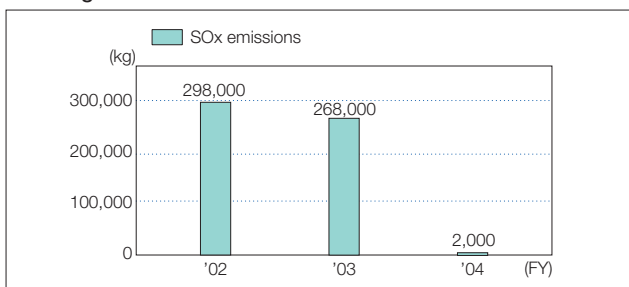
Company Overview

Komatsu do Brasil is located in São Paulo, Brazil and conducts the manufacture and sale of construction equipment and castings.

Environmental Conservation Activities

The company has changed its fuel for its casting furnaces from heavy oil to LPG, resulting in decreases in emissions of SO_x.

Change in SO_x Emissions Volume



Komatsu UK Ltd.

Company Overview

Komatsu UK is located in Birtley, United Kingdom, manufacturing and selling large- and medium-sized hydraulic excavators.

Environmental Conservation Activities

The company has 12 internal environmental auditors, conducting audits twice annually on the most significant items among a 21-point list of audit items and once yearly on other items. The company is currently working towards zero emissions, which it hopes to attain in FY2010. Its recycling ratio for FY2004 stood at 79%.

In the area of research and development, the company is making efforts toward a medium-term target of development of environmental technology based on LCA (see P. 16) through cooperative tie-ups with Komatsu. It forecasts being able to attain many individual target items during Tier 3.

Example of Social Contributions

The company works to involve local schools and the local environmental agency in various Green Projects.



Artificial pond increasing biodiversity



Children identify plant and animal life (Green Project)



Komatsu Hanomag GmbH

Company Overview

Komatsu Hanomag is based in Hannover, Germany and conducts the manufacturing and sales of construction equipment.

Environmental Conservation Activities

The company separates plant effluent and rainwater and recycles the rainwater for use as water to wash products about to be shipped.

The company also provides consultative services for its suppliers regarding environmental conservation activities and conducts a survey on the state of their environmental conservation measures every two years. The results of this survey showed that 30% of its suppliers had acquired either ISO14001 certification or its equivalent.



Washing a product about to be shipped

Komatsu Utility Europe S.p.A.

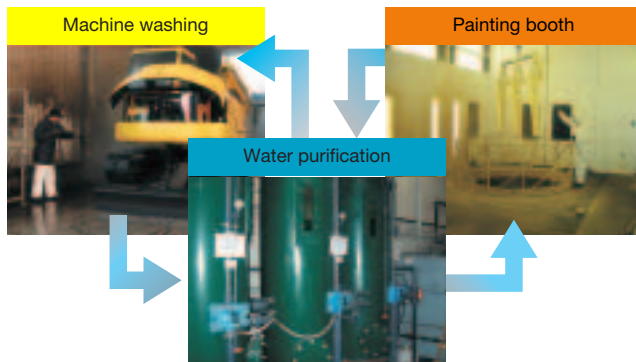
Company Overview

Located in Este (PD), Italy, Komatsu Utility Europe manufactures and sells utility equipment (small construction equipment).

Environmental Conservation Activities

The company launched an LCA project in 2004 and in 2005 began applying the LCA method to its new models. Its environmental conservation measures include a review of environment-friendly paints for powder coatings. The company also purifies water and recycles wastewater resulting from machine washings and from the painting process.

Recycling of Wastewater from Machine Washing and Painting



Komatsu Forest AB

Company Overview

Komatsu Forest is located in Umeå, Sweden and conducts the manufacturing and sales of forestry equipment.

Environmental Conservation Activities

Under the business concept, "Offering our customers the world's most profitable, environment-friendly superlative forestry machines," the company is increasing its purchases from ISO14001-certified suppliers.



Tracked harvester

PT Komatsu Indonesia Tbk

Company Overview

PT Komatsu Indonesia, based in Jakarta, Indonesia, manufactures and sells construction equipment, parts, and castings.

Environmental Conservation Activities

Located near the ocean, the company conducts periodic checks and maintenance with an emphasis on preventing gas pipe leakage resulting from salt-induced rusting.

Although the company is located in an area with ample groundwater resources, the company reuses its wastewater in its gardens.



Watering the gardens

Bangkok Komatsu Co., Ltd.

Company Overview

Bangkok Komatsu is located in Chonburi, Thailand and is a manufacturer and seller of construction equipment (mid-sized hydraulic excavators).

Environmental Conservation Activities

The company measures its releases of particulate matter, NOx, SOx, xylene, toluene, and other substances into the air as well as the pH, BOD, COD, and so on of its effluent. In all of these areas, Bangkok Komatsu maintains a stricter standard than what is required under the law, and a consultant conducts periodic checks on the company.



Komatsu Utility Europe S.p.A.
Mr. Gallana Claudio

Komatsu Forest AB (Umeå)
Mr. Per Fredriksson

PT Komatsu Indonesia Tbk
Mr. Supriyono

Bangkok Komatsu Co., Ltd.
Mr. Tanin Butsri

L&T-Komatsu Limited
Mr. T.V. Varadarajan

Formosa Komatsu Silicon Corporation
Mr. Shun-ho Wu

L&T-Komatsu Limited

Company Overview

L&T-Komatsu is headquartered in Bangalore, India and manufactures and sells construction equipment (hydraulic excavators) and hydraulic equipment.

Environmental Conservation Activities

In 2004, the company established a management system that incorporates both environmental conservation and health and safety issues.



Received an "Excellent Garden" commendation

Formosa Komatsu Silicon Corporation

Company Overview

Formosa Komatsu Silicon, located in Mailiao, Yunlin, Taiwan, manufactures and sells silicon wafers used in semiconductors.

Environmental Conservation Activities

The company's plant is located within an industrial park that has established its own environmental regulations for effluent that are more stringent than those set forth under the law. The company puts great effort into its attainment of zero emissions. Most of the waste materials from the plant are sold as resources, but other waste, such as that from the company's dining facilities, is made into organic fertilizer and used in growing plants, and still other waste is recycled as a heat source, thus enabling the company to attain zero emissions.



A green corner raised with organic fertilizer

Overview of Komatsu's Environmental and Social Activities to Date

1962	Continuous support of the Flower and Green Institute of the Flower Association of Japan since its founding	1997	Compliance Department established Second <i>Environmental Report</i> published
1990	Annual Directors' Caravan for Inter-office Communication (discussion sessions held when executive directors visit business units launched)	1998	Ethics Committee established (renamed Compliance Committee in 2001) First edition of <i>Komatsu's Code of Worldwide Business Conduct</i> published
1991	Clarification of Komatsu's corporate approach (Change of company name in Japanese public relations to "Komatsu", adoption of new corporate brand logotype) Earth Environment Committee established	1999	Executive Officer system established Board of Directors reorganized (smaller Board; election of an external director) Compensation Council established All four Komatsu manufacturing facilities acquire ISO14001 certification
1992	Komatsu Earth Environment Charter and Environmental Action Plan formulated Marking of plastic parts conducted Environment-friendly product mobile crusher BR60 put on the market	2000	<i>Environmental Report</i> again published; thereafter, published annually
1994	Statutory Auditors (Board) established First <i>Environmental Report</i> published	2001	Environment-friendly construction equipment GALEO series put on the market, satisfying Tier 2 emissions standards in Japan, the U.S., and Europe
1995	Transition to alternatives for chlorofluorocarbons in air conditioning in construction equipment completed Biodegradable hydraulic fluid put into practical use Specified chlorofluorocarbons and 1,1,1-trichloroethane completely phased out Objective of acquiring ISO14001 certification at all Komatsu manufacturing facilities stated	2002	All seven domestic Komatsu Group manufacturing facilities acquire ISO14001 certification All four Komatsu manufacturing facilities attain zero emissions
1996	Successful planting and raising of trees in tropical forest of Indonesia (2,500 trees)	2003	Environmental Affairs Department established Komatsu Earth Environment Charter revised
		2004	Corporate Social Responsibility Department established Sixth revised edition of <i>Komatsu's Code of Worldwide Business Conduct</i> published Komatsu Group business units acquiring ISO14001 certification total 30
		2005	Second Global Environmental Affairs Meeting convened

Working along with Our Customers

In order to be a company that is trusted by its customers, Komatsu is undertaking activities that fulfill its corporate social responsibility regarding product quality and product safety.

Quality and Reliability

Komatsu pursues Quality and Reliability and considers the maximization of corporate value as the fundamental principle of its business. This Quality and Reliability is considered something which increases as it gains the trust of all the company's stakeholders, most notably its customers, in accordance with the Five Guidelines that comprise Komatsu's Basic Managerial Policy (see P. 3). In order to achieve this, Quality and Reliability must be at the top of its Management Principles, and it is important for it to be pursued through the active involvement of all employees of the Komatsu Group.

Promotion of the Spirit of Manufacturers

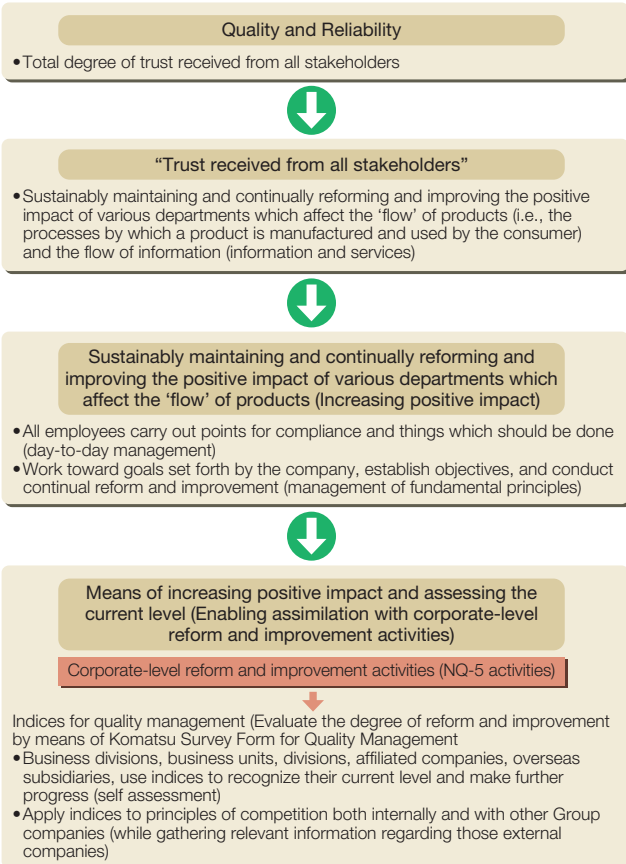
For Komatsu, a manufacturer, the Spirit of Manufacturers serves as the source of its competitive edge. This Spirit of Manufacturers that the Komatsu Group pursues is the provision of goods and services that bring satisfaction to its customers. This Spirit provides an ongoing challenge to all employees, from research and development personnel to sales and after-sales service providers, to manufacture safe and innovative products. At the same time, throughout all phases of a product's lifecycle, environmental friendliness is deemed important.

Regarding Quality Assurance

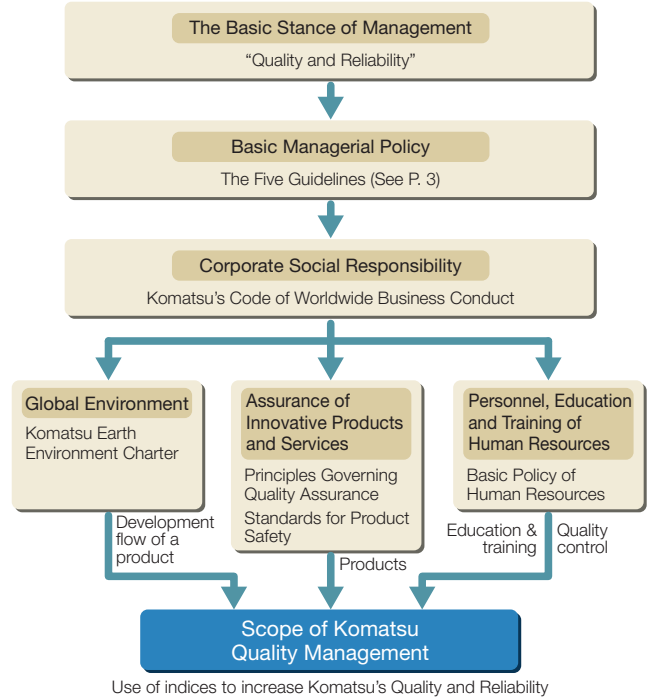
Fundamental Approach to the Pursuit of Quality Management

For Komatsu, putting the customer first constitutes one of its Basic Managerial Principles, and this principle is put into practice in all divisions, whether development, manufacturing, sales, after-sales service, or management. Komatsu considers a continuous process of reform and improvement to be fundamental. The scope of Komatsu's quality management is as indicated at the right. The company uses indices to promote such management.

■ Fundamental Approach to the Pursuit of Quality Management



■ Scope of Komatsu Quality Management



Principles Governing Quality Assurance

Komatsu has established the following principles regarding quality, which are put into practice by all its employees..

Principles that Increase Quality and Reliability

Constantly provide environment-friendly, safe and innovative products/services and systems from the viewpoint of our customers

Definition of Quality Assurance

The company has a responsibility to take actions that will ensure that it can provide products and services regarding which the customer is able to purchase feeling peace of mind and satisfaction, have peace of mind when using, and furthermore be able to use for many years to come.

Principles Governing Quality Assurance

- (1) Being at all times receptive to the views of the customer, considering issues from the perspective of the customer, and responding appropriately to the customer, thereby earning the customer's satisfaction, are fundamental to the job of every employee and constitute the responsibility of every employee. (Philosophy of putting customers first).
- (2) Complying with international standards and the legal frameworks particular to individual countries as a matter of course, and providing products and services which, looking at issues from the perspective of the customer, have incorporated proper regard for safety and peace of mind and that do not easily malfunction, are fundamental to the job of every employee and constitute the responsibility of every employee.
- (3) Providing at all times products and services which incorporate proper regard for global environmental conservation is fundamental to the job of every employee and constitute the responsibility of every employee.
- (4) Providing at all times products and services that are creative and provide benefits to the customer is fundamental to the job of every employee and constitute the responsibility of every employee.
- (5) Making at all times the customer have senses of safety, peace of mind, and satisfaction and being able to use the product for many years to come are a source of happiness for every employee.

Promotion of Product Safety to Ensure Customer Safety and Peace of Mind

In order for Komatsu's customers to be able to use its products safely and with peace of mind, the company puts safety and peace of mind at the forefront in its quality assurance activities. By formulating Standards for Product Safety and associated Principles and having all employees comply with them, Komatsu aims at the provision of products that are safe, provide peace of mind, and can be used for many years.

Information System for Product Safety and Services

In order to get information at an early a time as possible regarding problems with product safety in the marketplace, Komatsu has established an accident information system for product safety and conducts rapid responses to issues. Furthermore, it continuously makes improvements so that the company, including top management, can respond quickly through coordinated efforts, including (1) assessments of the cause of the incident and procedures to be taken, (2) contacting the relevant governing authorities, (3) deciding to take remedial measures such as conducting a recall of products still on the market.

Principles Governing Quality Assurance (Regarding product safety)

Complying with international standards and the legal frameworks particular to individual countries as a matter of course, and providing products and services which, looking at issues from the perspective of the customer, have incorporated proper regard for safety and peace of mind and that do not easily malfunction, are fundamental to the job of every employee and constitute the responsibility of every employee.

Standards for Product Safety

- (1) Compliance
The provision of products and services that comply with international standards and the legal frameworks particular to individual countries is fundamental to the job of every employee and constitutes the responsibility of every employee.
- (2) Safety via prevention
The provision of products and services that are safe and provide peace of mind and do no harm to the customer is fundamental to every employee and constitutes the responsibility of every employee.
- (3) Security regarding accidents
The provision of products and services that minimize any injury that might come to a customer who has an accident is fundamental to every employee and constitutes the responsibility of every employee.
- (4) Transparency
The ongoing provision of advance safety warnings after receiving information from the customer and, in the case of a defect arising in a product or service, the efforts to undertake prompt response measures and information provision, are fundamental to every employee and constitute the responsibility of every employee.
- (5) Improvement of organizational climate
In order to create a corporate climate in which product safety is emphasized, the standardization of the safety management system and safety techniques as well as ongoing efforts to improve them are at all times fundamental to every employee and constitute the responsibility of every employee.

Provision of Product Safety Information to the Customer

The provision of product safety information to customers is carried out mainly by the methods listed below. However, the company seeks to address each particular situation, with, for example, engineers or top managers visiting customers as the situation might require.

Methods for Provision of Product Safety Information to the Customer

- (1) Direct indication on the product itself or in the user's manual
- (2) Direct explanations to customers by Komatsu sales and service employees and sales and service employees of sales agencies
- (3) Telephone consultations with the service division of each plant and the customer service representatives in quality assurance divisions

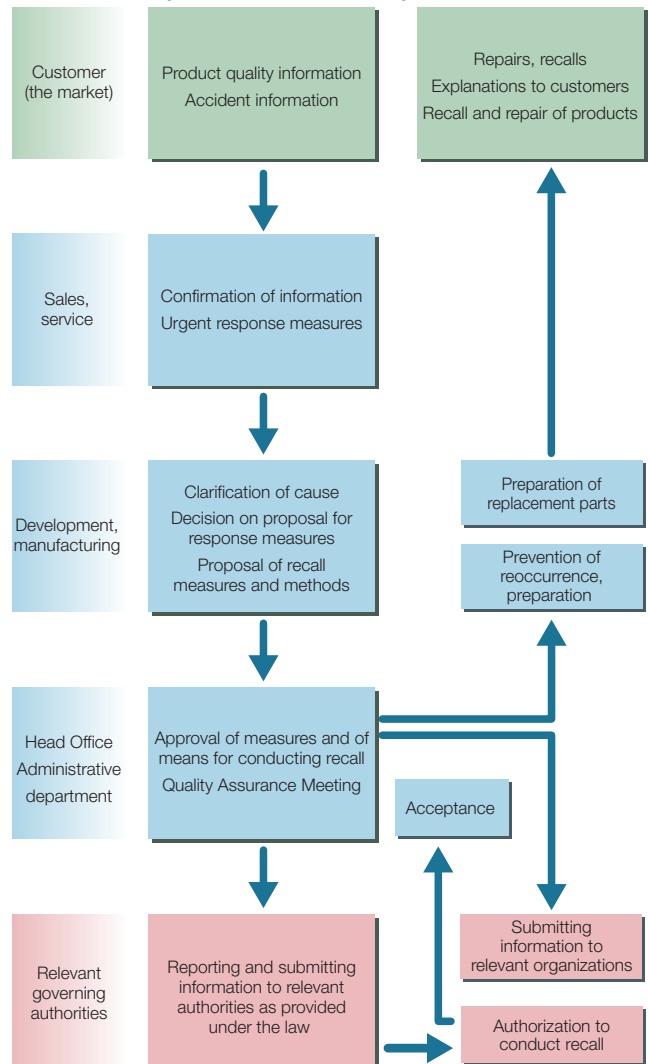
System for Dealing with Recalls

In recent years, the market has become more strictly aware of filing notices regarding recalls and means of dealing with them. Komatsu is also working to bring about organizational strengthening, comprehensive responses, and speed in action.

Procedure Governing Recalls

- (1) Proposal for rectification of the situation based on information regarding the defect; decision regarding what measures the company will take towards the market
- (2) File notice with relevant authorities as provided under the law
- (3) Inform customers by appropriate means
- (4) Take appropriate corrective measures, including, for example, repair, replacement, or refund

Information System for Product Safety



Working along with Our Employees

In addition to creating a personnel system that accurately reflects employees' abilities and achievements, which are valuable corporate assets, Komatsu is reducing risks in the work environment and aiming to create a workplace which allows employees to work safely and with peace of mind.

Personnel

Enhancing the Quality and Reliability of Employees

For a business, people, goods, money, and information are valuable assets and resources. In particular, "people"—the employees of Komatsu Group companies—are an irreplaceable asset.

Komatsu's management principles are Quality and Reliability. Komatsu recognizes the role of the personnel system in raising the quality and the reliability of the company's human resources and endeavors to create a system by which it can provide a workplace with opportunities for both creative and challenging endeavors.

Basic Policy of Global Human Resources

Personnel systems reflect the history and the culture of each particular region, and it is thus important to understand correctly the differences in systems and recognize those differences. The fundamental principles common to all Komatsu Group companies for personnel systems is set forth in the *Komatsu's Code of Worldwide Business Conduct* as stated below. However, each region has a personnel system that reflects the characteristics of that region.

- The uniqueness, character and privacy of individual employees shall be respected.
- Employees shall be fairly appraised and treated. They will not be unjustly discriminated against for reason of national origin, race, religion, age, sex, disability or other irrelevant factors. Should any form of violation be discovered, such as sexual harassment or any other unlawful employment practices, it will be investigated and necessary actions will be taken.
- In developing personnel policies, accordance with the understanding of employees must be ensured. Human resource policies and procedures shall be disclosed to the employees as appropriately and fully as possible.
- In each region, the Komatsu Group will comply with the ordinances concerning the rights of employees and work to maintain and manage the mental and physical health of employees.
- In each region, the Komatsu Group will fully respect international conventions or treaties on the rights of children and never engage in child labor.

(Taken from Chapter 5 of *Komatsu's Code of Worldwide Business Conduct*)

Efforts Undertaken by Komatsu

Personnel System that Reflects Accurately the Abilities and the Achievements of Employees

At typical Japanese companies, an age-based personnel system has been the rule, based on the assumption that employees will work continuously for a single company. However, such a system does not necessarily fairly reflect the abilities or the achievements of employees. Komatsu has been accurately evaluating the achievements of its employees for many years and made great efforts to utilize a system that reflects employees' achievements and ability. It has undertaken a further strengthening of this approach since 2003 and revised its personnel system accordingly. The most significant revisions have been as follows:

- Wages for general employees calculated in conjunction with achievements and a performance-based grade system (FY2004)
- Salaries for managers based on managerial duties (including the abolition of the qualification system and monetary awards for departmental achievements (FY2003)
- Cash balance-configured point system for retirement allowance and pension (FY2004)

Education and Training for Employees

Education and training programs encourage employees to try to achieve greater objectives. In its employee education, Komatsu is working to develop thorough curricula with the main goal of enabling employees to enhance their professional capacities.

Issues for the Future

Komatsu recognizes the role of personnel-related work to be that of creating the basis upon which each individual employee will, through his or her job, attempt to attain various goals. The following three topics are those in which Komatsu should invest particular effort in the future.

- Promotion of measures and policies that will enhance employees' desire to take on greater challenges
- Means of promoting greater mental and physical health among employees
- Equal opportunity in hiring and employment

Promotion of Measures and Policies that Will Enhance Employees' Desire to Take On Greater Challenges

Evaluation of the Achievements of Individual Employees

Having revised the personnel system such that it better reflects the abilities and the achievements of individual employees, the issue next becomes how to conduct evaluations of all individuals in a manner that is appropriate and fair. In coordination with the introduction of the new system, in April 2004 all managers retrained in how to conduct evaluations. In addition, Komatsu conducts training in means of evaluation for all newly-appointed managers as well as e-Learning-based education to follow up on such training.

Furthermore, an evaluations committee has been established jointly with the labor union at each business unit for the purpose of watching to confirm that evaluations are conducted properly. Komatsu has provided individual feedback regarding evaluations to managers since 1998 and to non-managerial employees since 2001 and has also set up a consultation office through which employees can have complaints and concerns acted upon.

Creating a Basis on which Employees Can Take On Greater Challenges

The public posting of personnel vacancies was introduced in 1986. In addition, there are some calls for an internal "free agent" system, and in the future the company intends to implement actively more measures and policies by which employees can be appropriately challenged.

Advances in the Mental and Physical Health of Employees

While health management is primarily the responsibility of the individual employee, insofar as employee health is important for the company as well as the individual, Komatsu conducts a health check for its employees every year. The percentage of employees undergoing health checks in FY2004 was 99.5% (Komatsu non-consolidated, excluding employees stationed abroad). While this represented a significant improvement over the previous fiscal year, the ultimate goal is to have 100% of employees undergo such health checks.

The importance of mental health in addition to physical health is increasing. Mental health issues are health issues that cannot be dealt with by individuals alone. Komatsu asks managers to pay close attention to their subordinates' situation at the workplace, notice at an early stage if there are symptoms, and then provide guidance or advice.

Since 2003, Komatsu has been educating managers regarding mental health, with the aim of fostering better understanding and awareness. Additionally, counseling is conducted at each business unit, keeping full respect for the protection of employees' privacy. Since 2004, Komatsu has been conducting its Employee Assistance Program, through which employees and their family members have been able to come in for counseling. Moreover, since April 2005, this system has been introduced in earnest to all Group companies in Japan, enabling employees and their family members to find solutions to their concerns.

Equal Opportunity in Hiring and Employment

Gender-equal Opportunity

Currently the number of women in managerial positions is low compared with the number of men, and Komatsu recognizes this as an issue to be addressed.

In addition, the thorough realization of working conditions such as child-care leave and shorter working hours would contribute to an environment in which it is easy to work, particularly for women. Through the revised labor agreement of 2003, Komatsu increased its flexibility in this area, allowing, for example, child-care leave to be taken for up to two years between the date of childbirth and the date on which the child enters nursery school (after reaching his or her first birthday) and shorter work hours for childrearing (no less than five hours per work-day) from the child's first birthday up to the March 31st immediately following the child's fourth birthday.

Employment of Handicapped Persons

Insofar as the manufacturing division's operations involve dealing with heavy objects, there are difficulties encountered in the hiring of handicapped persons. The company recognizes its hiring rate of handicapped persons as warranting attention and the company is determined to work to employ persons with handicaps.

Health and Safety

Basic Policy regarding Health and Safety

The entire Komatsu Group undertakes health and safety activities grounded in the basic policy below, aiming to create a cheerful workplace in which all employees at Group companies can work in a healthful and safe manner.

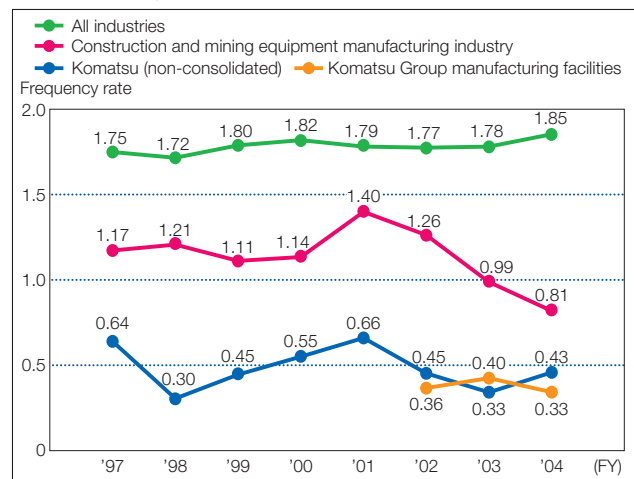
- As it works to advance employee health, Komatsu seeks to ensure a workplace environment in which employees can work safely and with peace of mind.
- In order for all employees to work cooperatively to make the above-mentioned objective come to fruition, Komatsu will promote proactive health and safety management activities.
- In particular, division officers at various levels will recognize these points as priority issues and take action accordingly.

Overview of Health and Safety System

■ Komatsu is working towards thorough implementation of the system depicted in the chart below.

	Komatsu Head Office	Group companies and Komatsu divisions
Organization	<ul style="list-style-type: none"> •Health and Safety Administration Center (Centralized Group-level office) •Human Resources Department (Centralized Group-level office with consultative services) 	<ul style="list-style-type: none"> •Plant managers, division head (managers supervising overall health and safety) •Division head supervising general affairs and human resources •Section head supervising health and safety •Managers supervising health and safety in each division, persons assigned to the promotion of health and safety, persons overseeing health and safety, etc. •Employees
Meetings	<ul style="list-style-type: none"> •Group Health and Safety Committee •Group Safety Supervisor Meeting •Group Safety and Health Conference 	<ul style="list-style-type: none"> •Health and Safety Committee

■ Incidence Rate of Work-related Accidents (Frequency rate of missed work)



Activities in FY2004 and Plans for FY2005

Safety Examination Patrols

Each Group company and division is conducting safety examination patrols. In FY2004, all Komatsu plants, eight other Group companies, nine sales agencies, and 12 affiliated rental companies had managers overseeing safety from other facilities conduct these checks through a desire to increase the level of workplace safety and maintain compliance. After conducting the checks, points for improvement are expanded horizontally within the Group.

The Group intends to continue this in FY2005 and beyond as a fundamental activity by which the Group's overall safety attainment level can be enhanced.

Risk Assessment Activities

All divisions of the Group related to manufacturing have launched risk assessment activities. In order to have the proper approach to risk management fully implemented, each Group company and division have selected one "model workplace," at which introductory education and trials were conducted. In FY2005 and beyond, Komatsu will be expanding the number of workplaces in which risk assessment has been introduced.

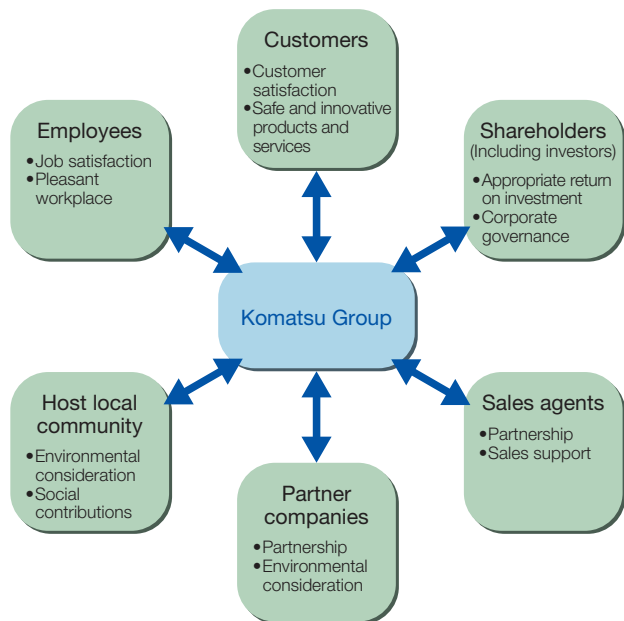
Communication with Our Stakeholders

Komatsu recognizes its stakeholders as equal and steady partners. Thus the company discloses accurate information in an appropriate and equitable manner and works to build and maintain a long-term, proper, and sincere trust relationship with its stakeholders.

Stakeholders

The Komatsu Group takes advantage of various opportunities to communicate with a large number of stakeholders. The Group listens to the expectations and demands of its various stakeholders, first of all its customers, in addition to its shareholders, sales agents, partner companies, members of the host local community, and of course its employees. It also works to create a solid partnership with them.

■ Komatsu's Relationship with its Stakeholders



Communication with Our Customers

Komatsu considers communication with its customers to be of great value to ensure that its products can be used safely and with peace of mind. In particular, when a new product with a unique function is put onto the market, Komatsu undertakes various activities, such as by convening explanatory sessions in which the product is used, to ensure its customers' understanding and enable them to use the new function to the greatest degree possible.

Furthermore, Komatsu's communication does not stop at one-way product explanations to its customers. Instead, it gives feedback from its customers to its development division about what its customers wish their equipment could do, actively incorporating those ideas into its development of future products.



Environmental recycling seminar held at the Komatsu Techno Center in the city of Izu, Shizuoka Prefecture

Maximizing Customer Satisfaction

In order to determine whether its quality assurance activities are actually contributing to increased customer satisfaction, Komatsu conducts checks of customer satisfaction on a regular basis. Komatsu takes the valuable opinions, demands, and evaluations of its customers very seriously and uses them to improve quality assurance activities even further.

Method for Ascertaining the Extent to Which Customers Are Satisfied

- (1) After the sale of new products or improved models of vehicles, sales and service representatives visit the customers directly and interview them regarding the vehicle
- (2) Komatsu collects input from the customer or the sales agent on survey items it sets forth
- (3) Sales and service representatives of Komatsu's sales agents, in the course of their day-to-day interactions with customers, listen to points brought up by the customers during visits and contact Komatsu regarding those points, treating them as business information

Maximizing Shareholder Profits

Shareholders are the owners of the company. Komatsu does its utmost to maintain the investment value entrusted to it by its shareholders and to maximize profits on that investment.

Maximization of shareholder profit involves not a pursuit of short-term gains but rather the extending of business performance over the long term with stable management that consistently strives to follow best business practices. Komatsu conducts its management with high transparency, providing in a timely way accurate information regarding managerial policy, business performance, dividends policy, and overall managerial issues.

Communication with Shareholders

Aiming at transparent management, Komatsu has since 1997 conducted 19 meetings for the purpose of interacting with shareholders all around Japan. So far Komatsu has been able to address over 4,600 shareholders in person.

In December 2004, such shareholder meetings were convened in Sapporo and Fukuoka, with about 150 and 270 people in attendance respectively. The President and CEO fielded questions after explaining the company's current state, addressing Komatsu's support activities towards the Niigata Chuetsu earthquake and its current share price and dividends, enabling active interaction with stakeholders.



Shareholders' meeting convened in Sapporo

Partnerships with Sales Agents

Komatsu is also pursuing corporate social responsibility (CSR)-related activities which are guided by an emphasis on safety, the environment, and compliance in the sales and service divisions, having forged a cooperative partnership with the Komatsu Domestic Dealer Meeting, comprised of domestic sales agents and affiliated rental companies.

In order to promote activities in safety and the environment, the two most important areas of CSR, Komatsu has put forth preliminary versions of manuals called "A Management System for Occupational Safety and Health" and "Environmental Guidelines." Sales agents have been undertaking various activities on the basis of these manuals on a trial basis.

Using CSR Manuals on a Trial Basis

In FY2004, several sales agencies used these manuals on a trial basis. The companies working with the manual "A Management System for Occupational Safety and Health" found that safety awareness increased and their Health and Safety Committees were revitalized as a result. The companies using the manual "Environmental Guidelines" saw improvements in the appropriate management of waste materials, waste oil, wastewater, hazardous materials, and other items that constitute important areas in risk management.

Portions of the manuals will be revised in the future, to be utilized nation-wide as "A Management System for Occupational Safety and Health: A Manual for Komatsu Sales Agencies and Rental Companies" and "Environmental Guidelines: A Manual for Komatsu Sales Agencies and Rental Companies." To achieve this, in FY2005 Komatsu plans as a first step to introduce them to 33 domestic sales agencies and 25 affiliated rental companies.

Efforts to Improve Environmental Awareness in Close Cooperation with Partner Companies

Komatsu urges its partner companies to establish and maintain a system by which the companies can be certain of complying with environmental regulations. In order to support a change in awareness at its partner companies, Komatsu conducted the following kinds of environmental education.

Holding of Seminars on ISO14001

In FY2004, Komatsu held the following seminars relevant to ISO14001.

- Introductory course on ISO14001 (October 29, 2004; 8 participants from 7 companies)
- Course on environmental law and environmental risk (November 25–26, 2004; 3 participants from 3 companies)

Study Tours of Companies with Particular Excellence in Environmental Management

On March 11, 2005, 54 participants from 48 partner companies visited Denso Corporation's Anjo Plant in order to study the environmental management system common to the entire company and also energy conservation efforts taking place within the facility.

Evaluating Degree of Environmental Friendliness through Environmental Check Sheets

Komatsu has asked its partner companies to establish environmental management systems no later than FY2008. For that reason, continuing the activities conducted in FY2003, an environmental check sheet was again created and distributed to the 129 members of the Komatsu "Midori-kai" group. All 129 companies submitted responses. Each company was asked to conduct a self-assessment of its environmental management systems and its effects on the environment and then submit the results of the assessment to Komatsu. It was found that 50 of the companies were ISO14001 certified.

In the future, Komatsu will be assessing the overall level, including compliance with the PRTR law, among other things, and undertaking activities to foster better responses.

Relationship with the Local Community

A company cannot continue to operate without a good relationship with the people in the host local community. Komatsu pursues harmonization of interests with the local community through close dialogue and strives to be a company that is as open as possible and that contributes to the community as a good corporate citizen.

"Open House" Day

Komatsu's manufacturing facilities hold "open house" days, inviting anyone from the public to participate, including customers, members of the host local community, suppliers, and family members of employees. At the session held at the Osaka Plant last year on November 7, about 24,000 people participated in all. In addition to the events for visitors to enjoy, the plant provided the opportunity to view the assembly line and to ride on some construction equipment, resulting in many pleasant memories for all involved.



Playing with construction equipment



Viewing the assembly line



Riding on construction equipment

Communication with Our Employees

Twice every year, the President and CEO of Komatsu himself visits Komatsu's inter-offices to explain to all its employees the state of the company, and the session held at the Head Office is conveyed to Komatsu's inter-offices and subsidiaries around the globe. This communication is not merely one-way explanations from the company head to the employees; instead, it includes opportunities for the employees to ask questions and give their views regarding managerial issues or day-to-day operations, thus representing true two-way communication.



Meeting with the President for employees in the Head Office region

Social Contributions

In order to bring about a rich society as it acts in harmony with people as a good corporate citizen, Komatsu has formulated five basic principles concerning its social contributions and is taking action in six distinct areas, such as the global environment and the host local community.

Basic Stance on Social Contributions

Komatsu believes that it is essential for it not only to conduct business but also to act in harmony with society as a good corporate citizen. For that reason, as one part of its social responsibility, the Group as a whole is actively taking on social contribution activities on a continuing basis.

Komatsu's basic stance on social contributions (the purpose and the five basic principles concerning its social contributions) is as follows.

Purpose

The Komatsu Group and its employees, as local community members, will contribute to society.

Basic Principles: Contributions shall be:

- Consistent
- In the public interest
- Voluntary
- Acceptable by employees
- Not aimed at advertisement.

Major Areas of Activities

Komatsu's main activities for social contributions are in the following six areas.

- (1) Global environment
- (2) Host local community
- (3) Support for education and learning
- (4) Promotion of culture and sports
- (5) Recovery from disasters and humanitarian assistance
- (6) Social welfare

Global Environment

Tropical Reforestation

In the ten years between 1990 and 2000, 11.7 million hectares of tropical forest—roughly one-third the size of Japan—disappeared annually. In particular, in the Republic of Indonesia, the tropical forests comprised of the dipterocarp species have been disappearing extremely quickly and are expected to disappear entirely by 2010. Dipterocarp is better known as lauan, and with its use in industry since ancient times its decrease in number has been particularly sharp, and it has been targeted in few reforestation activities. This particular species flowers and produces seeds only once every few years, and its seeds are extremely difficult to preserve, making it difficult to produce saplings for reforestation in a stable manner and thus inhibiting potential reforestation activities.

Since 1993, in a joint project with the Forestry Research and Development Agency of the Ministry of Forestry of the Republic of Indonesia, Komatsu has been engaged in developing production techniques for dipterocarp saplings. By proposing a method by which the environment within the greenhouse is adjusted, Komatsu has succeeded in producing saplings by the grafting method in volume and in

a stable manner. The company has set up a test plant in Indonesia, and some 300,000 saplings have been produced to date, with reforestation being conducted on a trial basis in locations around Indonesia.

In order to bring about production of saplings in large quantities for reforestation of the tropical forests, Indonesia's domestic forestry-related organizations are currently requesting the joint work of JICA (Japan International Cooperation Agency) and Komatsu through the Indonesian government in order to undertake the transfer of sapling production technology developed by Komatsu to local areas around Indonesia.

Komatsu believes that in the future it has a role to play in society by continuing its assistance in reforesting the tropical forests Indonesia and the rest of Southeast Asia.

Instruction to Other Companies regarding Environmental Conservation

All of Komatsu's domestic manufacturing facilities have attained zero emissions. From the stance that the results of those efforts should be utilized in activities in the host local community, the Oyama Plant has released all the know-how it has developed to date regarding zero emissions to the public, and it is now instructing the 16 companies in the Oyama Industrial Park in zero emissions activities.

Host Local Community

"Open House" Day

Komatsu holds "open house" days, inviting local residents, partner companies, and family members of employees, thereby building communication with the host local community.

Cooperation with Local Events

Each business unit participates in and cooperates with festivals and other events sponsored by its local chamber of commerce.

Sports Facilities Open to the Public

Each business unit opens up its gymnasium, field, tennis courts, various other recreational facilities, and so on to citizens' groups in their areas, fostering harmony with the host local community.

Head Office Rooftop Gardens Open to the Public

The rooftop gardens of the Head Office in Minato Ward, Tokyo have been open since 1966 in the case of the Japanese-style Sakura Cherry Garden and since 2001 in the case of the Western-style deck garden. Komatsu opens its rooftop gardens to the public every Friday from 2 PM to 4 PM.

Support of Education and Learning

Funds for the Promotion of Research at Universities

Komatsu promotes joint research to pursue state-of-the-art or future-looking technologies, after discussing corporate "needs" and university "seeds," including by actually undertaking such joint research.

Dispatching of Lecturers to Universities and the Like

Komatsu dispatches lecturers upon request to instruct university students in internal corporate technology development or corporate management.

Study Tours of Plants for Elementary and Junior High School Students

In response to requests for social studies-related study tours from area elementary and junior high schools, Komatsu conducts study tours of the plant and of recycling operations and provides opportunities to ride construction equipment.



Promotion of Culture and Sports

Support for the Flower and Green Institute of the Flower Association of Japan

As one of its contributions to society, Komatsu has been supporting the Flower and Green Institute of the Flower Association of Japan ever since its founding in 1962. The cherry trees planted in various locations by the Association have helped create a beautiful and rich natural environment.

National Cherry Tree Symposium

Every year, the Flower and Green Institute of the Flower Association of Japan holds the National Cherry Tree Symposium to foster cherry tree-related research, improvements in cultivation techniques, and research regarding cultural aspects of cherry trees, inviting from all around Japan cherry tree researchers as well as local government representatives of areas having well-known cherry blossom viewing sites.

The 2004 National Cherry Symposium was held on April 14–15 in the city of Suzaka, Nagano Prefecture, attracting some 1,200 participants. The 2005 Symposium was held on May 6–7 in the town of Ikawa, Akita Prefecture. With about 600 people participating, the Symposium took up the topics of (1) maintaining the cherry trees in Ikawa, and (2) creating a town with cherry trees with the participation of children.

The host site of the Symposium in 2005, Nihon Kokka-en, had been the recipient of 620 cherry tree saplings of 26 species at its founding in 1972, received from the Yuki farm of the Flower and Green Institute of the Flower Association of Japan. It currently boasts 2,000 cherry trees of 200 species, focused mainly on double-flowered cherry trees, representing one of only a few such academically important parks in Japan.



Cherry trees in Nihon Kokka-en in full bloom

Classes on Cherry Tree Growing

In recent years, areas that are famous for cherry trees have been taking active steps to foster the ability to preserve and maintain cherry trees, with local residents forming the core of participants in these activities. The Flower and Green Institute of the Flower Association of Japan accepts requests from local governments and sends out instructors for courses in proper maintenance of cherry trees.

Plans for Future Activities

In the three years starting from FY2004, the Institute is conducting a survey on the care of approximately 30,000 cherry trees in 200 locations across Japan. This is for the purpose of surveying the cultivation, management, species types, and usage of areas famous for cherry trees some 30 to 50 years after the trees were first planted as well as to enable better maintenance and management.

Komatsu Women's Judo Club

The Komatsu Women's Judo Club was founded in April 1991 as part of the company's 70th anniversary commemorative activities. Since that time the club has won the championship of the All Japan Company Judo Club Competition four times. Members of the club have also demonstrated a record of excellence in individual competitions both in Japan and abroad. In 2004, Ayumi Tanimoto participated in the 63kg weight category at the Athens Olympics and was awarded the gold medal.



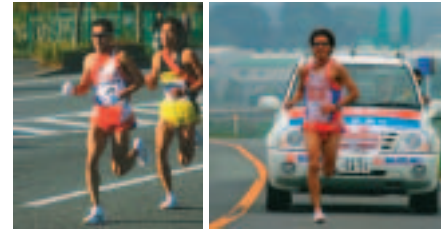
Judo for Kids

In addition to their regular practice, the Komatsu Women's Judo Club offer lessons for children once a week to support the growth of the next generation of athletes.



Komatsu Electronic Metals Track and Field Club

The Komatsu Electronic Metals Track and Field Club participates in events such as in the New Year's Ekiden (long-distance relay race) and the Around the Kyushu Ekiden.



Around the Kyushu Ekiden (left), New Year's Ekiden (right)

Recovery from Disasters and Humanitarian Assistance

Assistance to Areas Affected by the Niigata Chuetsu Earthquake

As recovery assistance to the areas affected by the October 2004 Niigata Chuetsu earthquake, Komatsu donated the use of construction vehicles for snow removal free of charge. It also provided pre-fabricated housing and conducted a campaign to collect donations for relief.

Recovery Assistance for the Earthquake off the Coast of Sumatra and Tsunami

To assist in the recovery of the areas affected by the December 2004 earthquake off the coast of Sumatra and tsunami, Komatsu donated the use of construction equipment free of charge to Indonesia, Thailand, India, and Sri Lanka and also dispatched operators and service personnel to the affected areas. It also made monetary contributions through the Japanese Red Cross Society.

Development of Two Models of Anti-personnel Landmine Removal Machines

Komatsu has developed two models of landmine removal machines, built upon the machine base of a bulldozer and a stabilizer (normally used for roadwork), for use in Afghanistan, which has many abandoned landmines from years of civil war.



Anti-personnel landmine removal machine (bulldozer-based)

Social Welfare

Contributions to Welfare Associations, Provision of Information on Welfare Assistance Activities

Each business unit makes financial contributions to the Japanese Red Cross Society, the Akai Hane ("red feather") community chest fundraising campaign, and more. Also, through the company's intranet, Komatsu provides information on welfare assistance activities to its employees.

Support for Employees' Social Contribution Activities

With a view to supporting employees' social contribution activities, Komatsu allows its workers to take short or extended leaves of absence for volunteer activities, and for activities of particular prominence the company awards official commendation. Official commendation for volunteer activities in FY2005 went to an employee who had contributed to the promotion of sports through his long involvement with rugby coaching.

Environmental Data by Domestic Manufacturing Facility

Overview	Manufacturing facility	Awazu Plant <small>(established in 1921)</small>	Osaka Plant <small>(established in 1952)</small>	Oyama Plant <small>(established in 1962)</small>
	Location	Komatsu, Ishikawa Prefecture	Hirakata, Osaka Prefecture	Oyama, Tochigi Prefecture
	Main products	Small and midsize bulldozers; small hydraulic excavators; mini, small, and midsize wheel loaders; large presses; tunnel machinery; armored vehicles, etc.	Large bulldozers, midsize and large hydraulic excavators, mobile recycling machinery (crushers, soil stabilizers, tub grinders, etc.)	Engines for construction/industrial machinery, diesel generators, hydraulic equipment, excimer lasers, etc.
	Site/building area <small>(1,000 m²)</small>	796/173	554/157	594/193
	Number of employees	3,797	2,419	1,950
	Date of ISO14001 certification acquisition	September 1997	July 1997	May 1997

*The number of employees includes those working for Komatsu affiliates on the premises.

*Established year means as Komatsu Group.

Compliance Conditions to Major Regulations	Air										
	Item	Unit	Facility	Regulated value	Actual value	Facility	Regulated value	Actual value	Facility	Regulated value	Actual value
	Nitrogen oxides (NOx)	ppm	Boiler	180	118	Boiler	150	15.7	Diesel engine	950	710
			Heating furnace	180	64	Metal furnace	180	39	Gas turbine	70	20
		ppm	Diesel engine	950	800	Paint drying furnace	230	8.7	Boiler	250	130
						Diesel engine	500	7.6			
	Sulfur oxides (SOx)	—	K-value regulation	17.5	1.36	Regulation of total emissions (m ³ N)	10.4	0.002	K-value regulation	7.0	0.43
	Soot and dust	g/m ³ N	Boiler	0.3	0.006	Boiler	0.03	0.001	Diesel engine	0.1	0.029
			Heating furnace	0.2	0.015	Metal furnace	0.1	0.001	Gas turbine		0.015
		g/m ³ N	Diesel engine	0.1	0.025	Paint drying furnace	0.1	0.001	Boiler		0.009
					Diesel engine	0.08	0.031				

*Regulated values are in accordance with the Air Pollution Control Law and local regulations.

Compliance Conditions to Major Regulations	Wastewater													
	Item	Regulated value according to the Water Pollution Control Law Unit	Regulated value				Actual value				Regulated value			
			Regulated value	Maximum	Minimum	Average	Regulated value	Maximum	Minimum	Average	Regulated value	Maximum	Minimum	Average
	pH	5.8–8.6	5.8–8.6	7.3	6	6.5	5.8–8.6	7.5	7	7.2	5.8–8.6	7.3	7	7.2
	BOD	160 mg/l	80	9.8	0.6	3.5	65	3.6	0.7	1.9	25	17.1	3.1	10.1
	COD	160 mg/l	80	33.0	0.6	7.1	65	5.5	2.6	3.7	25	19	6.3	13.9
	Suspended substances (SS)	200 mg/l	120	49.0	ND	7.0	110	4.6	1.6	2.6	50	16.7	2.5	7.7
	Mineral oils	5 mg/l	5	0.8	ND	0.5	3	1.2	0.1	0.2	5	1.4	ND	0.6
	Copper	3 mg/l	3	0.05	ND	0.05	3	ND	ND	ND	3	ND	ND	ND
	Zinc	5 mg/l	5	0.22	ND	0.10	5	0.11	0.05	0.08	5	ND	ND	ND
Nitrogen	120 mg/l	120	22	2.2	6.3	120	7.9	3.6	5.75	20	5.4	2.3	4.1	
Phosphorus	16 mg/l	16	2.2	0.01	0.5	16	0.63	0.63	0.63	2	0.6	0.1	0.3	
Cadmium	0.1 mg/l	0.1	ND	ND	ND	0.01	ND	ND	ND	0.1	ND	ND	ND	
Lead	0.1 mg/l	0.1	ND	ND	ND	0.05	ND	ND	ND	0.1	ND	ND	ND	
Chromium (VI)	0.5 mg/l	0.5	ND	ND	ND	0.05	ND	ND	ND	0.1	ND	ND	ND	
Trichloroethylene	0.3 mg/l	0.3	0.004	ND	0.002	0.03	ND	ND	ND	0.3	ND	ND	ND	
Tetrachloroethylene	0.1 mg/l	0.1	ND	ND	ND	0.01	0.001	0.0007	0.001	0.1	ND	ND	ND	
Dichloromethane	0.2 mg/l	0.2	ND	ND	ND	0.02	ND	ND	ND	0.2	—	—	—	
1,1,1-trichloroethane	3 mg/l	3	0.001	ND	0.001	1	0.001	ND	0.001	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.

Major Performance	Environmental impact					
	Item	Actual value		Item	Actual value	
	Total CO ₂ emissions	49,981 t-CO ₂		Total CO ₂ emissions	37,017 t-CO ₂	
	NOx total amount	69,857 kg		NOx total amount	1,839 kg	
	SOx total amount	2,208 kg		SOx total amount	1,119 kg	
	Total emissions of waste	3,076 t		Total emissions of waste	3,320 t	
	Amount recycled	3,054 t		Amount recycled	3,320 t	
	Recycling ratio	99 %		Recycling ratio	100 %	
	BOD emissions	13,392 kg		BOD emissions	446 kg	
	COD emissions	27,153 kg		COD emissions	855 kg	
Wastewater	3,841,607 m ³ /year		Wastewater	232,783 m ³ /year		
Wastewater		579,200 m ³ /year				
Energy consumption						
Item	Actual consumption	Converted to calorie equivalents (GJ)	Item	Actual consumption	Converted to calorie equivalents (GJ)	
Electricity	78,481 MWh	804,429	Electricity	73,684 MWh	755,261	
Heavy oil A	4,732 kℓ	184,219	Heavy oil A	0 kℓ	0	
Kerosene	21 kℓ	767	Kerosene	1,204 kℓ	44,856	
Light oil	85 kℓ	3,226	Light oil	0 kℓ	0	
LPG, et al.		113,294	LPG, et al.		113,452	
Total		1,105,975	Total		913,569	
Electricity			Electricity	61,939 MWh	634,875	
Heavy oil A			Heavy oil A	641 kℓ	24,954	
Kerosene			Kerosene	19,790 kℓ	737,296	
Light oil			Light oil	3,799 kℓ	146,307	
LPG, et al.			LPG, et al.		11,870	
Total			Total		1,555,302	

*Data for the Awazu Plant include data for Komatsu Engineering (Awazu)

Mooka Plant (established in 1971)	Construction Equipment Electronics Division (established in 1966)	Research Division (established in 1985)	Komatsu Zenoah Co. Kawagoe Plant (established in 1965)
Mooka, Tochigi Prefecture	Hiratsuka, Kanagawa Prefecture	Hiratsuka, Kanagawa Prefecture	Kawagoe, Saitama Prefecture
Large wheel loaders, rough-terrain cranes, dump trucks, motor graders, road-related equipment, etc.	Control equipment for construction equipment, thermoelectric modules, temperature control equipment, etc.	R&D on business fields of the Komatsu Group	Mini construction equipment, small outdoor power equipment (trimmers/brush cutters, chipper shredders, etc.), overhauling of aircraft engines, etc.
320/66	40/2	224/23	107/44
1,178	364	200	738
April 2000	March 2000	—	July 2002

Facility	Regulated value	Actual value	Facility	Regulated value	Actual value	Facility	Regulated value	Actual value	Facility	Regulated value	Actual value
Boiler	180	53	N/A	—	—	Service generator	180	163	Cogeneration engine	950	860
Diesel engine	950	820				Cold/hot water generator	134	39	Hot water boiler	180	75
K-value regulation	8.0	1.48				K-value regulation	11.5	0.97	K-value regulation	9.0	0.13
Boiler	0.3	0.007	N/A	—	—	Service generator	0.1	0.009	Cogeneration engine	0.1	0.1
Diesel engine	0.1	0.059				Cold/hot water generator	0.26	0.005	Hot water boiler	0.3	0.002

Regulated value	Actual value			Regulated value	Actual value			Regulated value	Actual value			Regulated value	Actual value		
	Maximum	Minimum	Average		Maximum	Minimum	Average		Maximum	Minimum	Average		Maximum	Minimum	Average
5.8–8.6	7.9	6.9	7.4	5.0–9.0	8.3	6.3	7.6	5.8–8.6	7.5	7	7.3	5.0–9.0	7.8	6.4	7.1
25	24.5	ND	6.6	600	200	ND	48	10	5	1	2.7	600	230	0.5	67
25	18.0	4.8	11.3	—	—	—	—	25	6	5	5.7	160	31	ND	12.1
50	8.4	ND	5.3	600	150	ND	32	65	14	2	6.0	600	64	ND	33.3
5	ND	ND	ND	5	ND	ND	ND	5	ND	ND	ND	5	3.5	0.5	0.9
3	0.1	ND	0.1	3	ND	ND	ND	1	ND	ND	ND	3	ND	ND	ND
5	0.1	ND	0.1	5	0.03	ND	0.03	1	0.19	0.02	0.08	5	ND	ND	ND
120	45.0	2	18.8	—	—	—	—	—	—	—	—	240	23	0.5	8.7
16	4.8	0.4	2.5	32	1.3	1.3	—	—	—	—	—	32	0.6	0.1	0.3
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	0.1	ND	ND	ND	0.1	ND	ND	ND
0.1	ND	ND	ND	0.5	ND	ND	ND	0.5	ND	ND	ND	0.5	ND	ND	ND
0.3	ND	ND	ND	0.3	ND	ND	ND	0.3	—	—	—	0.3	ND	ND	ND
0.1	ND	ND	ND	0.1	ND	ND	ND	0.1	—	—	—	0.1	ND	ND	ND
0.2	ND	ND	ND	0.2	ND	ND	ND	0.2	—	—	—	0.2	ND	ND	ND
3	ND	ND	ND	3	ND	ND	ND	3	—	—	—	3	ND	ND	ND

Item	Actual value	Item	Actual value	Item	Actual value	Item	Actual value
Total CO ₂ emissions	13,981 t-CO ₂	Total CO ₂ emissions	1,981 t-CO ₂	Total CO ₂ emissions	2,655 t-CO ₂	Total CO ₂ emissions	6,868 t-CO ₂
NOx total amount	268,590 kg	NOx total amount	0 kg	NOx total amount	3,060 kg	NOx total amount	21,428 kg
SOx total amount	7,943 kg	SOx total amount	0 kg	SOx total amount	126 kg	SOx total amount	482 kg
Total emissions of waste	1,907 t	Total emissions of waste	244 t	Total emissions of waste	309 t	Total emissions of waste	1,293 t
Amount recycled	1,907 t	Amount recycled	244 t	Amount recycled	286 t	Amount recycled	1,293 t
Recycling ratio	100 %	Recycling ratio	100 %	Recycling ratio	93 %	Recycling ratio	100 %
BOD emissions	256 kg	BOD emissions	928 kg	BOD emissions	11 kg	BOD emissions	3,635 kg
COD emissions	437 kg	COD emissions	— kg	COD emissions	24 kg	COD emissions	651 kg
Wastewater	38,604 m ³ /year	Wastewater	24,529 m ³ /year	Wastewater	4,226 m ³ /year	Wastewater	53,973 m ³ /year

Item	Actual consumption	Converted to calorie equivalents (GJ)	Item	Actual consumption	Converted to calorie equivalents (GJ)	Item	Actual consumption	Converted to calorie equivalents (GJ)	Item	Actual consumption	Converted to calorie equivalents (GJ)
Electricity	4,864 MWh	49,851	Electricity	5,160 MWh	52,890	Electricity	3,684 MWh	37,763	Electricity	6,144 MWh	62,972
Heavy oil A	4,079 kl	158,798	Heavy oil A	0 kl	0	Heavy oil A	366 kl	14,248	Heavy oil A	1,223 kl	47,596
Kerosene	21 kl	776	Kerosene	0 kl	0	Kerosene	67 kl	2,496	Kerosene	0 kl	17
Light oil	209 kl	8,051	Light oil	0 kl	0	Light oil	8 kl	294	Light oil	117 kl	4,508
LPG, et al.		8,320	LPG, et al.		0	LPG, et al.		1,054	LPG, et al.		14,671
Total		225,795	Total		52,890	Total		55,855	Total		129,764

Environmental Data by Domestic Manufacturing Facility

Overview	Manufacturing facility	Komatsu Zenoah Co. Koriyama Plant (established in 1995)	Komatsu Electronic Metals Co., Ltd. Hiratsuka Technical Center (established in 1961)	Komatsu Electronic Metals Co., Ltd. Nagasaki Plant (established in 1985)
	Location	Koriyama, Fukushima Prefecture	Hiratsuka, Kanagawa Prefecture	Omura, Nagasaki Prefecture
	Main products	Hydraulic cylinders, swivel joints, gear pumps	R&D on wafers	Mirror-polished wafers, epitaxial wafers
	Site/building area (1,000 m ²)	296/23	27/9	144/41
	Number of employees	264	113	1,221
	Date of ISO14001 certification acquisition	July 2002	November 1998	April 1998

*The number of employees includes those working for Komatsu affiliates on the premises.

*Established year means as Komatsu Group.

Compliance Conditions to Major Regulations	Air																										
	Item	Unit	Facility	Regulated value	Actual value	Facility	Regulated value	Actual value	Facility	Regulated value	Actual value																
	Nitrogen oxides (NOx)	ppm	Cogeneration engine	950	684	N/A	—	—	Boiler	260	122																
	Sulfur oxides (SOx)	—	K-value regulation	11.5	0.6			K-value regulation	17.5	0.07																	
	Soot and dust	g/m ³ N	Tempering (electric) furnace	0.2	0.003	N/A	—	—	Boiler	0.3	0.01																
												Baking (electric) furnace	0.2	0.003													
																					Cogeneration engine	0.2	0.023				

*Regulated values are in accordance with the Air Pollution Control Law and local regulations.

Compliance Conditions to Major Regulations	Wastewater																
	Item	Regulated value according to the Water Pollution Control Law	Unit	Regulated value			Actual value				Regulated value			Actual value			
				Maximum	Minimum	Average	Maximum	Minimum	Average	Maximum	Minimum	Average	Maximum	Minimum	Average		
pH	5.8–8.6	5.8–8.6	7.3	5.8	6.8	5.7–8.7	7.5	6.5	7.1	5.9–8.5	7.5	6.9	7.2				
BOD	160 mg/l	40	20	ND	8.7	300	6.5	ND	2.2	200	47.8	15.6	28.9				
COD	160 mg/l	40	15	5.3	9.5	160	5.1	1.6	2.9	180	17.4	6.6	9.9				
Suspended substances (SS)	200 mg/l	70	10.9	ND	4.3	300	51	3.4	20.9	200	34	7	13				
Mineral oils	5 mg/l	1	ND	ND	ND	5	0.9	ND	0.5	3	1.4	ND	0.7				
Copper	3 mg/l	2	0.03	0.03	—	3	ND	ND	ND	1	ND	ND	ND				
Zinc	5 mg/l	4	0.2	0.2	—	3	0.06	ND	0.05	0.5	0.05	0.03	0.04				
Nitrogen	120 mg/l	120	16.3	16.3	—	125	5.1	4.3	4.7	216	128	52	94				
Phosphorus	16 mg/l	16	6.4	6.4	—	32	0.5	0.5	0.5	3.2	0.08	0.03	0.05				
Cadmium	0.1 mg/l	0.1	ND	ND	—	0.1	ND	ND	ND	0.01	ND	ND	ND				
Lead	0.1 mg/l	0.1	ND	ND	—	0.1	ND	ND	ND	0.01	ND	ND	ND				
Chromium (VI)	0.5 mg/l	0.2	ND	ND	ND	0.5	ND	ND	ND	0.05	ND	ND	ND				
Trichloroethylene	0.3 mg/l	0.3	ND	ND	—	0.3	ND	ND	ND	0.03	ND	ND	ND				
Tetrachloroethylene	0.1 mg/l	0.1	ND	ND	—	0.1	ND	ND	ND	0.01	ND	ND	ND				
Dichloromethane	0.2 mg/l	0.2	ND	ND	—	0.2	ND	ND	ND	0.02	ND	ND	ND				
1,1,1-trichloroethane	3 mg/l	3	ND	ND	—	3	ND	ND	ND	0.03	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.

Major Performance	Environmental impact						
	Item	Actual value		Item	Actual value		
	*Refer to the Business Activities and Environmental Impact (P. 10) for details on the methods used to calculate amounts.	Total CO ₂ emissions	7,957 t-CO ₂		Total CO ₂ emissions	3,065 t-CO ₂	
	*Total emissions of waste are expressed as a composite of the amount recycled and the amount disposed.	NOx total amount	12,754 kg		NOx total amount	0 kg	
	*Recycle ratio is calculated by dividing the amount recycled by the amount generated.	SOx total amount	479 kg		SOx total amount	0 kg	
	*Total emissions of BOD and COD are calculated by multiplying the average concentration by the amount of wastewater.	Total emissions of waste	977 t		Total emissions of waste	74 t	
		Amount recycled	977 t		Amount recycled	74 t	
		Recycling ratio	100 %		Recycling ratio	100 %	
		BOD emissions	183 kg		BOD emissions	109 kg	
		COD emissions	200 kg		COD emissions	145 kg	
	Wastewater	20,979 m ³ /year		Wastewater	49,243 m ³ /year		
	Wastewater	1,950,126 m ³ /year					
Energy consumption							
Item	Actual consumption	Converted to calorie equivalents (GJ)	Item	Actual consumption	Converted to calorie equivalents (GJ)		
Electricity	8,533 MWh	87,467	Electricity	7,981 MWh	81,805		
Heavy oil A	1,404 kℓ	54,658	Heavy oil A	0 kℓ	0		
Kerosene	0 kℓ	0	Kerosene	0 kℓ	0		
Light oil	0 kℓ	0	Light oil	0 kℓ	0		
LPG, et al.		14,909	LPG, et al.		0		
Total		157,034	Total		81,805		
					2,994,465		

Komatsu Electronic Metals Co., Ltd. Miyazaki Plant (established in 1973)	Komatsu Forklift Co., Ltd. Tochigi Plant (established in 1968)	Komatsu Castex Ltd. Himi Plant (established in 1952)	Komatsu House Ltd. (established in 1971)
Miyazaki-gun, Miyazaki Prefecture	Oyama, Tochigi Prefecture	Himi, Toyama Prefecture	Shinshiro, Aichi Prefecture
Mirror-polished wafers, wafers for discrete products	Forklift trucks, automated guided vehicles, automated warehouses, refrigerated warehouses, etc.	Iron castings, steel castings, molds for casting, etc.	Prefabricated structures for businesses
59/14	217/48	403/63	31/10
701	849	607	78
December 1998	February 1998	January 2000	March 2002

*Komatsu Castex Ltd. is the successor company of the former Komatsu Castex Ltd. established in 1952.

Facility	Regulated value	Actual value	Facility	Regulated value	Actual value	Facility	Regulated value	Actual value	Facility	Regulated value	Actual value
Boiler	180	64	Small boilers*	(260.0)	110	Annealing furnace	200	62	Boiler	250	81
						Annealing furnace (small)	180	28			
						Calciners	220	6			
K-value regulation	17.5	2.63	K-value regulation	7.0	0.08	K-value regulation	17.5	5 or less	K-value regulation	9.0	0.23
Boiler	0.3	0.038	Small boilers*	(0.5)	0.006	Fuel sulfur (%)	0.96	0.4 or less	Boiler	0.3	0.008
						Annealing furnace	0.25	0.01 or less			
						Annealing furnace (small)	0.2	0.01 or less			
						Calciners	0.15	0.01 or less			
						Arch furnace	0.1	0.01 or less			
						Cupola furnace	0.2	0.01 or less			

*Regulated values of NOx, soot and dust are in accordance with self-regulatory measures, because these boilers are small.

Regulated value	Actual value			Regulated value	Actual value			Regulated value	Actual value			Regulated value	Actual value		
	Maximum	Minimum	Average		Maximum	Minimum	Average		Maximum	Minimum	Average		Maximum	Minimum	Average
5.8-8.6	7.6	7.1	7.4	5.8-8.6	7.4	7.1	7.2	5.8-8.6	7.5	7.3	7.4	5.8-8.6	8.6	5.8	6.7
25	4.1	0.5	2.2	30	11.2	1.3	6.7	20	2.5	0.8	1.8	25	22	3	8.5
160	3.8	1.3	2.1	30	9.9	2.5	4.9	120	6.4	3.2	4	160	47	5.8	12.6
30	6	1	1.6	50	13	ND	5.4	100	9	4	5.6	120	6	ND	2.4
5	ND	ND	ND	5	ND	ND	ND	5	0.6	ND	0.5	5	ND	ND	ND
3	0.01	ND	0.01	3	ND	ND	ND	1	ND	ND	ND	-	-	-	-
5	ND	ND	ND	5	0.23	ND	0.11	1	ND	ND	ND	-	-	-	-
120	5	5	-	20	4.3	3.7	3.0	60	-	-	-	120	49	2.7	14.6
-	-	-	-	2	0.4	0.3	0.3	8	-	-	-	16	10	0.1	0.9
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	-	-	-	-
0.2	ND	ND	ND	0.5	ND	ND	ND	0.5	ND	ND	ND	-	-	-	-
0.3	ND	ND	ND	0.3	ND	ND	ND	0.3	-	-	-	-	-	-	-
0.1	ND	ND	ND	0.1	ND	ND	ND	0.1	-	-	-	-	-	-	-
0.2	ND	ND	ND	0.2	ND	ND	ND	0.2	-	-	-	-	-	-	-
3	ND	ND	ND	3	ND	ND	ND	3	-	-	-	-	-	-	-

Item	Actual value	Item	Actual value	Item	Actual value	Item	Actual value
Total CO ₂ emissions	43,948 t-CO ₂	Total CO ₂ emissions	11,137 t-CO ₂	Total CO ₂ emissions	63,879 t-CO ₂	Total CO ₂ emissions	936 t-CO ₂
NOx total amount	5,155 kg	NOx total amount	11,094 kg	NOx total amount	9,313 kg	NOx total amount	256 kg
SOx total amount	1,891 kg	SOx total amount	4,097 kg	SOx total amount	21,450 kg	SOx total amount	832 kg
Total emissions of waste	8,427 t	Total emissions of waste	2,565 t	Total emissions of waste	22,573 t	Total emissions of waste	584 t
Amount recycled	8,426 t	Amount recycled	2,565 t	Amount recycled	22,424 t	Amount recycled	503 t
Recycling ratio	100 %	Recycling ratio	100 %	Recycling ratio	99 %	Recycling ratio	86 %
BOD emissions	6,065 kg	BOD emissions	322 kg	BOD emissions	556 kg	BOD emissions	67 kg
COD emissions	5,858 kg	COD emissions	235 kg	COD emissions	1,382 kg	COD emissions	100 kg
Wastewater	2,756,845 m ³ /year	Wastewater	48,459 m ³ /year	Wastewater	317,630 m ³ /year	Wastewater	7,946 m ³ /year

Item	Actual consumption	Converted to calorie equivalents (GJ)	Item	Actual consumption	Converted to calorie equivalents (GJ)	Item	Actual consumption	Converted to calorie equivalents (GJ)	Item	Actual consumption	Converted to calorie equivalents (GJ)
Electricity	94,824 MWh	971,946	Electricity	13,751 MWh	140,951	Electricity	94,810 MWh	971,803	Electricity	774 MWh	7,934
Heavy oil A	1,557 kℓ	60,614	Heavy oil A	1,592 kℓ	61,977	Heavy oil A	2,418 kℓ	94,133	Heavy oil A	90 kℓ	3,504
Kerosene	1,298 kℓ	48,358	Kerosene	10 kℓ	373	Kerosene	1,308 kℓ	48,731	Kerosene	2 kℓ	75
Light oil	3 kℓ	103	Light oil	109 kℓ	4,183	Light oil	0 kℓ	0	Light oil	10 kℓ	393
LPG, et al.		766	LPG, et al.		20,673	LPG, et al.		198,437	LPG, et al.		6,083
Total		1,081,787	Total		228,156	Total		1,313,103	Total		17,988

Environmental Data by Overseas Manufacturing Facility

The Americas

Overview	Manufacturing facilities	KAC				Hensley	KMX	KDB
		Komatsu America Corp.				Hensley Industries, Inc.	Komatsu Mexicana S.A. de C.V.	Komatsu do Brasil Ltda.
		Chattanooga Manufacturing Operation	Candiac Manufacturing Operation	Peoria Manufacturing Operation	Newberry Manufacturing Operation			
Location		Tennessee, U.S.A.	Quebec, Canada	Illinois, U.S.A.	South Carolina, U.S.A.	Texas, U.S.A.	Sahagún, Mexico	São Paulo, Brazil CEP
Main products		Hydraulic excavators, motor graders	Wheel loaders	Large wheel loaders, large dump trucks	Utility equipment (small construction equipment)	Buckets, teeth, edges and adapters	Attachments for construction and mining equipment	Hydraulic excavators, bulldozers
Number of employees		283	259	502	136	493	173	582
Date of ISO14001 certification acquisition		April 1998	October 1999	March 2002	March 2004	—	September 2001	January 2002
Energy consumption	Electricity MWh	9,230	6,949	16,886	2,905	32,600	4,165	27,039
	Heavy oil, light oil, et al. kl	337	—	83	—	162	17	358
	Natural gas thousand m ³	1,022	814	2,979	83	0	—	—
	LPG, et al. t	LPG 30	—	LPG 13	LPG 14	—	LPG 36	LPG 274
	Total energy consumption GJ	144,872	55,598	266,652	32,750	327,258	42,078	156,618
Environmental impact	CO ₂ t-CO ₂	7,928	1,668	21,447	1,792	18,144	2,261	2,943
	Water consumption t	9,304	6,514	71,151	400	114,131	2,145	21,391
	Total emissions of waste t	1,884	1,271	2,476	386	44,474	7	8,000

Europe

Overview	Manufacturing facilities	KUK	KOHAG	KMG	KUE	KFAB
		Komatsu UK Ltd.	Komatsu Hanomag GmbH	Komatsu Mining Germany GmbH	Komatsu Utility Europe S.p.A.	Komatsu Forest AB
		Birtley, United Kingdom	Hannover, Germany	Düsseldorf, Germany	Este (PD), Italy	Umeå, Sweden
Main products		Hydraulic excavators	Wheel loaders, compactors	Ultra-large hydraulic excavators	Utility equipment (small construction equipment)	Forestry equipment
Number of employees		459	481	401	631	345
Date of ISO14001 certification acquisition		December 1998	September 2000	July 2002	November 2001	October 2003
Energy consumption	Electricity MWh	10,086	7,483	6,070	4,754	6,467
	Heavy oil, light oil, et al. kl	681	—	6	—	915
	Natural gas thousand m ³	1,623	806	1,423	899	—
	LPG, et al. t	—	—	—	—	—
	Total energy consumption GJ	171,357	102,183	108,866	64,468	59,060
Environmental impact	CO ₂ t-CO ₂	8,471	5,867	6,161	4,362	2,628
	Water consumption t	12,011	5,773	11,916	11,396	7,077
	Total emissions of waste t	2,257	424	3,732	2,066	249

Asia

Overview	Manufacturing facilities	KI	BKC	LTK	KCCM	KCF	KSC	FKS
		PT Komatsu Indonesia Tbk	Bangkok Komatsu Co., Ltd.	L&T-Komatsu Limited	Komatsu (Changzhou) Construction Machinery Corp.	Komatsu (Changzhou) Foundry Corporation	Komatsu Shantui Construction Machinery Co., Ltd.	Formosa Komatsu Silicon Corporation Mailiao Plant
		Jakarta, Indonesia	Chonburi, Thailand	Bangalore, India	Jiangsu, China	Jiangsu, China	Shandong, China	Yunlin, Taiwan R.O.C.
Main products		Hydraulic excavators, bulldozers, wheel loaders	Hydraulic excavators	Hydraulic excavators	Wheel loaders, hydraulic excavators, motor graders	Iron castings and foundry molds for construction and mining equipment	Hydraulic excavators	Silicon wafers
Number of employees		724	238	685	220	269	402	468
Date of ISO14001 certification acquisition		June 2000	September 2001	June 1999	September 2000	December 1999	December 2000	March 2001
Energy consumption	Electricity MWh	27,336	4,286	7,068	1,473	19,023	5,656	110,513
	Heavy oil, light oil, et al. kl	225	207	230	320	648	1,124	1,236
	Natural gas thousand m ³	—	—	—	—	—	18	—
	LPG, et al. t	LPG 280	LPG 28	LPG 75	LPG 59	Coal, LPG 7,214	—	—
	Total energy consumption GJ	284,561	55,367	89,430	27,585	455,625	68,504	1,083,855
Environmental impact	CO ₂ t-CO ₂	16,270	3,803	5,574	2,019	37,610	5,270	62,633
	Water consumption t	113,713	15,666	80,079	42,777	223,346	162,634	1,229,162
	Total emissions of waste t	808	450	1,284	317	14,943	342	4,359

Notes

- All data, except the number of employees, were derived from performances of all manufacturing facilities during FY2004. The number of employees was based on the companies' data as of March 31, 2005.
- Conversion to CO₂ and total energy consumption were based on statistical data of each region, country, and that of IEA for 2000.
- Total emissions of waste are expressed as a composite of the amount recycled and the amount disposed.

Independent Review on *Environmental & Social Report 2005*

Regarding the Independent Review

Komatsu views the independent review process as crucial for ensuring the integrity and objectivity of its *Environmental & Social Report*. For that reason, Komatsu has received an independent review from Tohmatsu Environmental Research Institute Ltd., a member of the

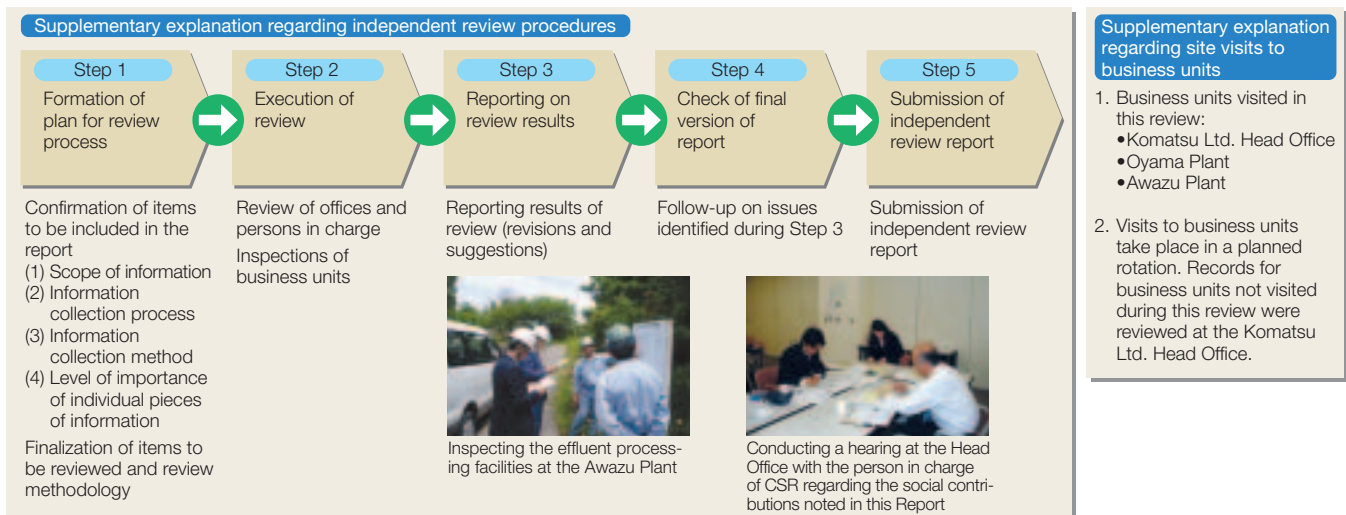
Deloitte Touche Tohmatsu Group. The results are as represented below with regard to the information appearing in the *Environmental & Social Report 2005*.

<http://www.teri.tohmatsu.co.jp/English/index.html>



Supplementary Explanation Regarding the Conducting of Independent Review Procedures

As a supplementary explanation, the following provides an overview of the review procedures conducted during an independent review.



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•Further information on Komatsu's environmental activities can be found on the Komatsu website.

<http://www.komatsu.com/CompanyInfo/csr/>

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