MITSUBISHI HEAVY INDUSTRIES, LTD.

2004

MHI Social and Environmental Report

CSR Report

Corporate Philosophy

Based on the concept of "The Three Corporate Principles," which has been shared by the Mitsubishi group from the company's beginnings and on the creed instituted in 1970, our company has adopted the management ethos that, through our corporate business activities, we will contribute to the progress of society. Committing to fair corporate business activities in compliance with the relevant laws and regulations, we will continue to provide technologies and products that support the foundation of society, earning the trust of our customers and contributing to the development of society, and perform high-level activities in fields related to environmental conservation and community relations.

Creed

1. We strongly believe that the customer comes first and that we are obligated to be an innovative partner to society.
2. We base our activities on honesty, harmony, and a clear distinction between public and private life.
3. We shall strive for innovative management and technological development from an international perspective.

Reason for Instituting the Creed

In Japan there are many enterprises with their own "creeds" which simply represent their management concept. Mitsubishi Heavy Industries, Ltd. has a creed of this type, also. This creed was instituted in 1970 on the basis of the policy advocated by Koyata Iwasaki, president of Mitsubishi Goshi Kaisha in the 1920s, to indicate the essential attitude of the company, the mental attitude of the employees, and the future directions of the company.

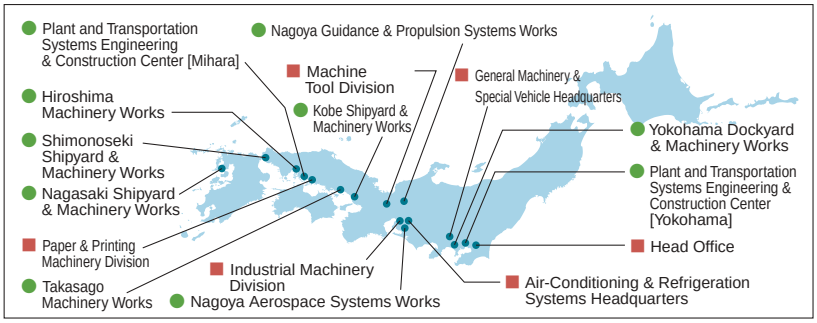
The reason for instituting the present creed is so that all of us can call to mind our one hundred years of tradition, and strive for further development in the future.

Issued June 1, 1970

Company Profile

Trade Name: Mitsubishi Heavy Industries, Ltd.

Founded : July 7, 1884
Established : January 11, 1950
President : Kazuo Tsukuda, President
Head Office : 16-5 Konan 2-chome, Minato-ku, Tokyo
Capital : 265.6 billion. yen (as of March 31, 2004)
Employees : 34,396 [Non-consolidated] (as of March 31, 2004)



Locations

Headquarters & Divisions

General Machinery & Special Vehicle Headquarters
3000, Tana, Sagamihara, Kanagawa Postal Code: 229-1193
Phone: 81-42-761-1101 (General Affairs Dept.)
Fax: 81-42-763-0800

Air-Conditioning & Refrigeration Systems Headquarters
3-1, Asahi-machi, Nishi-Biwajima-cho, Nishi-Kasugai-gun, Aichi Postal Code: 452-8561
Phone: 81-52-503-9200 (General Affairs Dept.)
Fax: 81-52-503-3533

Industrial Machinery Division
1, Aza Takamichi, Iwatsuka-cho, Nakamura-ku, Nagoya Postal Code: 453-8515
Phone: 81-52-412-1110 (General Affairs Dept.)
Fax: 81-52-412-1399

Paper & Printing Machinery Division
5007, Itozaki-cho, Mihara, Hiroshima Postal Code: 729-0393
Phone: 81-848-67-2054 (General Affairs & Labor Section)
Fax: 81-848-63-4463

Machine Tool Division
130, Roku-jizo, Ritto, Shiga Postal Code: 520-3080
Phone: 81-77-553-3300 (General Affairs Dept.)
Fax: 81-77-552-3745

Works

Nagasaki Shipyard & Machinery Works
1-1, Akunoura-machi, Nagasaki Postal Code: 850-8610
Phone: 81-95-828-4121 (General Affairs Dept.)
Fax: 81-95-828-4105

Kobe Shipyard & Machinery Works
1-1-1, Wadasaki-cho, Hyogo-ku, Kobe Postal Code: 652-8585
Phone: 81-78-672-2220 (General Affairs Dept.)
Fax: 81-78-672-2245

Shimonoseki Shipyard & Machinery Works
6-16-1, Hikoshima Enoura-cho, Shimonoseki Postal Code: 750-8505
Phone: 81-832-66-5978 (General Affairs & Labor Section)
Fax: 81-832-67-7010

Yokohama Dockyard & Machinery Works
12, Nishiki-cho, Naka-ku, Yokohama Postal Code: 231-8715
Phone: 81-45-629-1201 (General Affairs Dept.)
Fax: 81-45-629-1202

Hiroshima Machinery Works
4-6-22, Kan-on-shin-machi, Nishi-ku, Hiroshima Postal Code: 733-8553
Phone: 81-82-291-2112 (General Affairs Dept.)
Fax: 81-82-294-0260

Takasago Machinery Works
2-1-1, Arai-cho Shinhama, Takasago Postal Code: 676-8686
Phone: 81-794-45-6125 (General Affairs Dept.)
Fax: 81-794-45-6900

Nagoya Aerospace Systems Works
10, Oye-cho, Minato-ku, Nagoya Postal Code: 455-8515
Phone: 81-52-611-2121 (General Affairs Dept.)
Fax: 81-52-611-9360

Nagoya Guidance & Propulsion Systems Works
1200, O-aza Higashi-tanaka, Komaki Postal Code: 485-8561
Phone: 81-568-79-2113 (General Affairs Dept.)
Fax: 81-568-78-2552

Plant and Transportation Systems Engineering & Construction Center
[Mihara]
5007, Itozaki-cho, Mihara, Hiroshima Postal Code: 729-0393
Phone: 81-848-67-2072 (General Affairs & Labor Section)
Fax: 81-848-67-2816
[Yokohama]
3-3-1, Minatomirai, Nishi-ku, Yokohama Postal Code: 220-8401
Phone: 81-45-224-9288 (General Affairs & Labor Section)
Fax: 81-45-224-9932

Mitsubishi Minatomirai Industrial Museum
Mitsubishi Juko Yokohama Bldg., 3-3-1, Minatomirai, Nishi-ku, Yokohama Postal Code: 220-8401
Phone: 81-45-224-9031 Fax: 81-45-224-9902

*The Machine Tool Division, Hiroshima Plant, was closed in December 2003.

Editorial Policy

This report relays Mitsubishi Heavy Industries, Ltd.'s business approach and activities related to the development of a sustainable society. Mitsubishi Heavy Industries, Ltd. (MHI) hopes that this report will serve as a foundation for positive dialogue with the variety of stakeholders regarding business practices. Specifically, a special feature, "The Role of Mitsubishi Heavy Industries, Ltd.," clearly defines MHI's concept regarding the four pillars of the company (power & energy, transportation & security, environment & society, and industries) to build a sustainable society. The feature also contains detailed commentaries from representative stakeholders.

In addition, a special report, "MHI's Commitment to Environmental Issues", describes nuclear power generation, CO2-recovery technologies and renewable energies considering how these technologies can aid the realization of a sustainable society.

In developing this report, we further enhanced the quality of information reported in past environmental reports by providing specific figures. In addition, this report introduces a new item called "sociality report."

We received third-party comments on this report from key figures as a representative of stakeholders, and present the comments herein.

Scope of reporting covered by this report

- Organization: This report covers information pertaining to Mitsubishi Heavy Industries, Ltd.. However, the business outline contains some consolidated data, (such as sales figures and the number of employees).
- Period: April 2003 to March 2004 (information on certain activities after March 2004 is included)
- Date issued: June 2004 (date of previous report issued: June 2003)
- Referenced guidelines: Edited based on "2002 Sustainability Reporting Guidelines" by Global Reporting Initiative (GRI) and "Environmental Reporting Guidelines (Fiscal Year 2003 Version)" by the Japanese Ministry of the Environment.

INDEX

We will fulfill our corpo through company busi

Kazuo Tsukuda
President

We Have Established a Vision and Mission to Clarify Our Social Role.

This is the 120th year since the foundation of Mitsubishi Heavy Industries, Ltd.. Since foundation, we have carried out our activities in accordance with the management ethos of contributing to the progress of society through company business.

The significance of “contribution to the progress of the society,” however, changes with time. Today, its significance lies in contributing to the safe, affluent life of the people of the world and continuing to develop the company by building trust with customers and advancing the technology of the company, while maintaining harmony between the global environment and economic activities. Based on this idea, I have established a vision of our company and a mission to implement it, clearly showing the direction that Mitsubishi Heavy Industries, Ltd. should take to people both in and outside the company. (See the lower part of the next page.) Our company will operate consistently in accordance with this vision and mission.

We Will Manage the Company with Full Commitment to our Corporate Social Responsibility (CSR).

It is a basic duty of an enterprise to satisfy its customers’ requirements, to enhance the motivation of its employees, and to pay a proper dividend to its shareholders. These duties, however, cannot be fulfilled if the enterprise loses the confidence of society. Mitsubishi Heavy Industries, Ltd. can only continue to exist if it is accepted by society as a reliable company. In this sense, we will promote various projects that will profit a wide range of people from a global viewpoint with full commitment to our corporate social responsibility (CSR).

We Will Ensure that CSR Is Established As an Enterprise Culture, and Aim to Be an Enterprise that Can Always Be Relied upon by Society.

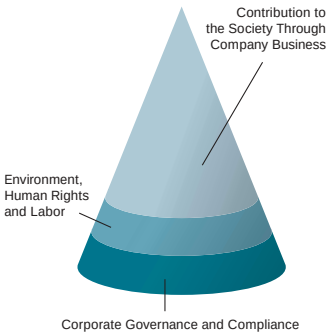
To fulfill the social responsibilities of the enterprise, our company will always engage in the three following activities.

The first activity is concerned with “corporate governance,” “compliance” and others. In particular, “compliance” is essential for our company to win the trust of society and sustain healthy development, which is prerequisite for the survival of any enterprise.

The second activity is concerned with “the environment, human rights and labor.” We promote improvement in all company activities concerning such matters.

The third activity is contributing to realizing a safe, secure, fulfilling life for the people of the world through company business.

Through performing these three activities, we will ensure the establishment of CSR as an enterprise culture and aim to be an enterprise that can always be relied upon by society.



bility

rate social responsibility (CSR)

ness for the well-being of the people of the world.

We Will Meet the Requirements of Society by Emphasizing the Importance of Technology and Manufacturing.

Mitsubishi Heavy Industries, Ltd. deals sincerely with the requirements of every customer. We consider even the latent wishes of our customers, and develop them into actual products in the most suitable form.

As experts in manufacturing products, we provide various technologies and products that form the foundations of society in fields such as “power & energy,” “transportation & security,” “environment and society” and “industries.” We consider each of them to be essential in making people’s lives fulfilling. For example, in the field of the environment, we promote the utilization of clean energy such as wind power; on the other hand, we are making efforts in the business of absorbing or eliminating substances harmful to the global environment in areas such as the detoxification of PCBs and the recovery of exhaust CO_2 that may cause global warming.

In addition, handing down technology and raising the next generation are important contributions to society. As one of our activities in this field, we have opened the “Mitsubishi Minatomirai Industrial Museum” to communicate with local residents and heighten the interest of the young people in the sciences.

In this museum, you can freely experience and study various scientific matters. “Environment,” “Space,” “Ocean,” “Construction,” “Energy” and “Technologies All Around Us” are the six main themes. We hope that visiting children will enjoy the sciences through this museum, and create a future Japan with lofty ambitions.

We Disclose Our Ideas and Activities, and We Dialogue with You.

From this year, we have issued a Social and Environmental Report (CSR Report)” in which social and economic articles have been added to the previous “Environmental Report” that was mainly composed of articles on our environmental conservation activities.

We would appreciate your frank opinions and requests concerning our activities.

I sometimes walk along the Tama River. The water of the river is far cleaner compared to the time of rapid economic growth. I am happy to see ayu (sweetfish) returning to the Tama River.

Vision & Mission

Based upon the “vision” and “mission,” Mitsubishi Heavy Industries, Ltd. (MHI) contributes to the well-being of the people of the world.

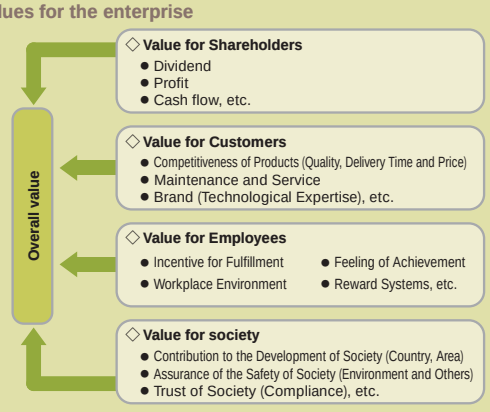
Vision

“MHI, a premier global organization.”
We are an enterprise that continuously develops and contributes to the safe, fulfilling life of people worldwide, living up to the trust of customers with outstanding technology.

Mission

We endeavor to improve the four values of the enterprise, “value for shareholders,” “value for customers,” “value for employees” and “value for society.”

Four values for the enterprise



Relationship with Stakeholders

"MHI, a premier global organization." This is our company vision.
MHI seeks to achieve a "win-win" relationship that will benefit our wide variety of stakeholders around the world as we progress with business globalization, and will continue with our commitment to social responsibility as we work toward realizing a sustainable society.

Mitsubishi Heavy Industries, Ltd. (MHI) has formed relationships with various local communities around the world where we conduct our business activities and where our products are delivered, and will continue to make every effort to maintain sufficient communication to solidify the relationship of trust with each community.

▶P45~46

Local Communities

Suppliers

We believe the starting point of our procurement activities lies in "fairness." MHI performs fair, impartial transactions with our suppliers around the globe.

▶P47

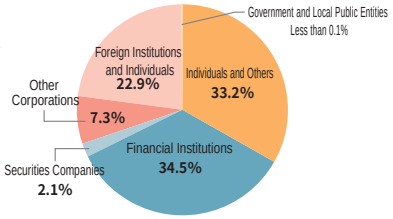
MITSUBISHI HEAVY INDUSTRIES, LTD.

Shareholders

MHI builds a relationship of trust with its shareholders by activating communication, such as information disclosure. Considering factors such as profit standards and the retained earnings necessary for future business development, the company pays dividends that meet shareholder expectations.

▶P47

Classified by Type of Shareholder (%)
(As of March 31, 2004)



Employees

MHI is constantly working to improve its human resources system to help employees realize individual potential and to energize the organization. MHI also considers employee work conditions, human rights and safety.

▶P43~44

NPO・NGO

To identify our role in building a sustainable society and developing a company that contributes to society, it is essential to listen to the various opinions of specialists in non-profit organizations (NPOs) and non-governmental organizations (NGOs). MHI will continue to value its partnerships with such organizations.

▶P47

Customers

MHI considers its customers to be not only the immediate delivery destinations of our products and services but also those that benefit from our products and services. MHI will continue to enhance communication with society.

▶P41~42

Government

MHI contributes to the government through participation in national projects and product delivery. In addition, our company promotes business activities that comply with the laws and regulations of overseas countries and other social standards.

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The Role of Mitsubishi Heavy Industries, Ltd.

The corporate philosophy of Mitsubishi Heavy Industries, Ltd.
has not changed since the founding of the company 120 years ago.
Our company is determined to contribute to society
by manufacturing and providing products.

The Mitsubishi group, from the company's beginnings,
has shared the basic concept of "The Three Corporate Principles."
The spirit of these principles continues to live
in our company creed.
The first condition of our creed is that
"We strongly believe that the customer comes first and that we are obligated
to be an innovative partner to society."
This is Mitsubishi Heavy Industries, Ltd.'s CSR*.

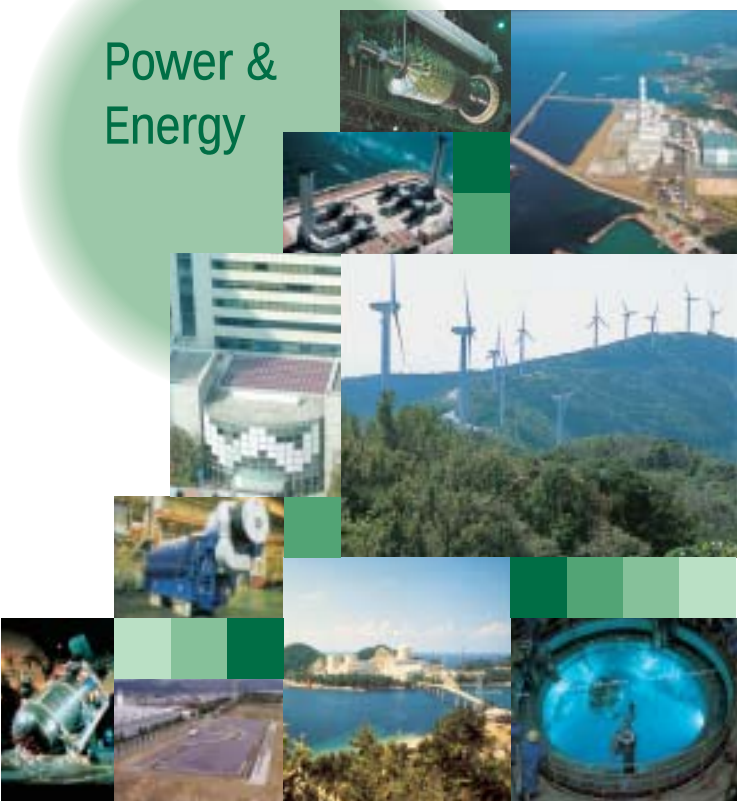
By manufacturing and providing products,
our company contributed to the industrialization
and cultural enlightenment of Japan 120 years ago.
Our mission now is to work toward realizing
safe, fulfilling lives for all people around the world.
Above all, our company will make every effort
to reduce the global environmental burden
through our technologies and products.
This is to be our contribution to the world.

To ensure that human beings and society continue for many years to come,
to ensure that we leave this beautiful earth to the children of the future...
By manufacturing and providing products,
we will improve communication with people around the world,
and continue to propose
and provide products and ideas that aid in building a prosperous society.
This is our role.

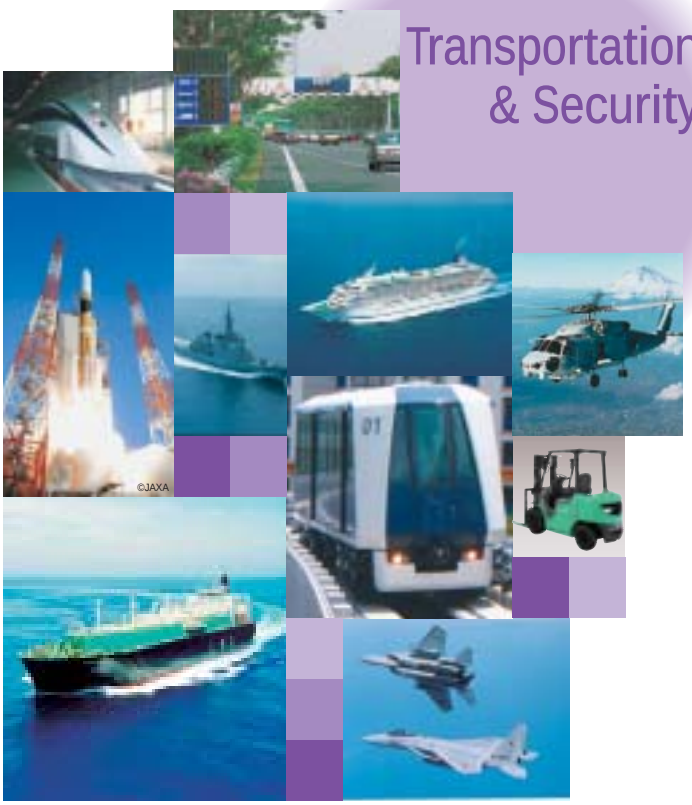
*Corporate Social Responsibility

Toward the Realization of a Sustainable Society

Power & Energy

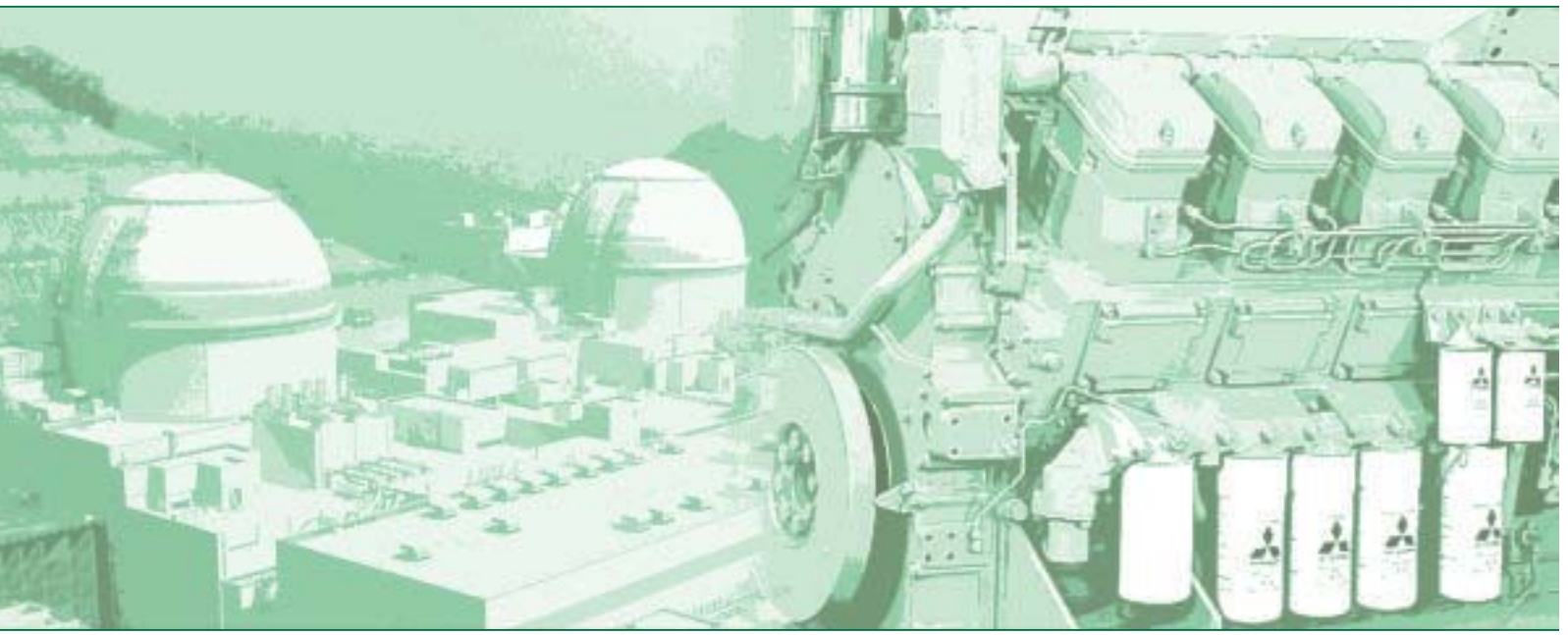


Transportation & Security



Environment & Society

Industries

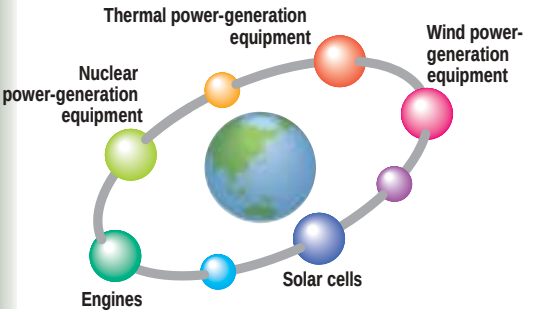


Power & Energy

Mission

Supply all areas of the world with highly efficient, clean energy

Our Power & Energy Business



MHI's Approach

In response to the demand for sustainable energy supply, Mitsubishi Heavy Industries, Ltd., supplies clean energy with high efficiency to all over the world.

MHI employs alternative energy-related technologies such as the integrated coal gasification combined cycle power plant and the pressurized fluidized bed combustion boiler, as well as a variety of clean, natural energies such as wind power, geothermal power and solar cells, and is involved in the development of new energies such as fuel cells.

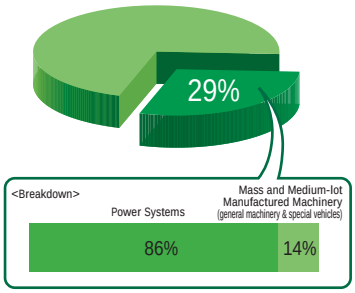
MHI has already made many accomplishments in the field of nuclear power, which is a type of energy that does not emit CO_2 during the power generation process. The company prioritizes safety in the utilization of nuclear power, and in handling and managing radioactive waste based on a reliable system, while making every effort to further nuclear power safety research and development.

MHI also has received high acclaim from and earns the trust of the international community for its energy-saving developments, such as the high-efficiency gas turbines, steam turbines, ultra-supercritical boilers, and combined cycle power plants that realize the world's highest thermal efficiency, thereby greatly contributing to a reduction in CO_2 emissions and the effective use of fossil fuels. In addition, the company has also developed the environment-friendly gas engines that exhibit the world's highest power generating efficiency with low NOx, contributing to environmental conservation.

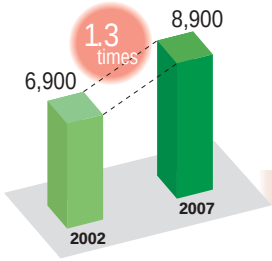
MHI will continue to pursue even higher efficiency and attain the optimal mix of various energies.

Medium-Term Business Plan (2004-2007)

Composition of orders received (FY 2007)



Orders (Unit: 100 million yen)



Comment from a Stakeholder

Women's Ability Reactive Program (WARP)
Managing Director

Chiiko Inoue

As head of a non-profit organization that supports women's participation in the working world, Chiiko Inoue visits nuclear power plants and related equipment-manufacturing sites, conducting activities related to power and energy.

Energy that Supports Our Safety and Peace of Mind

The Women's Ability Reactive Program (WARP) is involved in promoting women's participation in the working world. In recent years, we have held women's study groups on energy issues closely related to everyday living as well as educational activities for children.

Having experienced the Great Hanshin Earthquake, I realize the importance of power and energy as a lifeline. As a consumer, I visited a plant site that produces nuclear power and spoke with many people in the area.

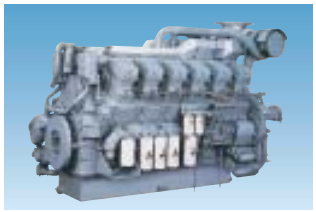
In the same way that consumers find out about producers, I would like the producer, Mitsubishi Heavy Industries, Ltd., to be aware of its consumers. Easy-to-understand explanations, considering that the end user is an average citizen, are greatly appreciated.

To ensure that we pass on to the next generation a society in which we can live with peace of mind requires a higher degree of energy self-sufficiency in Japan. We count on Mitsubishi Heavy Industries, Ltd. to increasingly contribute to building a safer, more secure society through its technological developments.

Products that Support the Optimal Mix of Energies

Nuclear Power Plant

Free of CO_2 emissions, nuclear power provides energy suitable for global warming countermeasures.

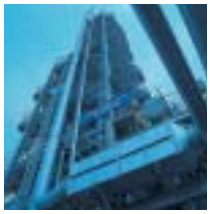


Diesel Engine

Highly efficient and economical, yet with minimal NOx, noise and vibration, the diesel engine is the heart of the power plant.

Co-generation System

The co-generation system produces electricity by engines and recovers exhaust heat and steam which can be utilized for air conditioning also.



Integrated Coal Gasification Combined Cycle (IGCC)

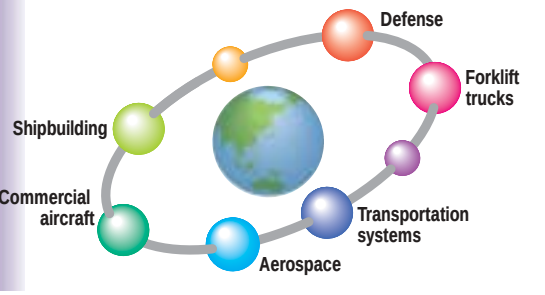
The IGCC is a next-generation thermal power-generation system. Compared with conventional ultra-supercritical pulverized coal thermal power, the system exhibits outstanding efficiency and CO_2 reduction.

Transportation & Security

Mission

A company with expertise in all modes of transportation, from land, sea, and air to space, and in the defense sector

Our Transportation & Security Business



MHI's Approach

From ships to aircraft, transportation systems, and launch vehicles, Mitsubishi Heavy Industries provides various transportation equipment, supporting safe, comfortable travel and contributing to the distribution of goods around the world.

In the shipbuilding and ocean development sector, MHI delivers container ships and LNG carriers around the world that support a wide variety of transportation, and constructs large, luxury passenger ships and high-speed ferries. The company also continually considers the environment, developing products such as marine engines with low NOx emissions. MHI received environmental protection notation (EP notation) from the Lloyd's Register of Shipping for its LNG carriers, which was the first application to an LNG carrier in the world.

In the aerospace sector, MHI has made numerous accomplishments as a pioneer in Japan. MHI is currently proceeding with research and development for the wing box of Boeing's next-generation aircraft, the 7E7, and is thereby establishing a firm position in the global aviation industry. MHI is also carrying out a preliminary research into the development of a small-sized commercial jet that will achieve reduced environmental impact as well as improved comfort and convenience. In addition, MHI is involved in the privatization of the domestically produced H-IIA launch vehicle as a prime contractor.

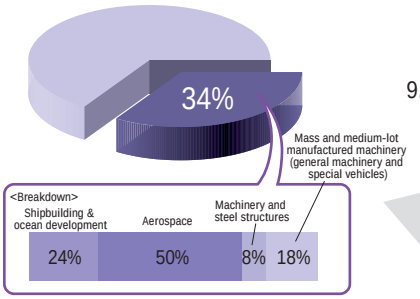
In the transport equipment sector, MHI will continue to be actively involved in the development of new transportation systems, such as new energy-saving transportation systems free of waste gas, as a comfortable means of daily travel.

In the defense sector, to protect people's lives and property, MHI makes every effort, utilizing cutting-edge technologies, to maintain and develop the defense production and technological bases of Japan by solution proposals, research and development, manufacturing and operations support of equipment.

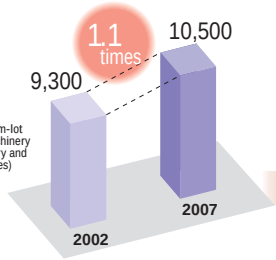
*To receive this notation, the product must clear various conditions such as emission regulations related to NOx and SOx, the prohibited use of CFC, and rules related to the prevention of oil contamination.

Medium-Term Business Plan (2004-2007)

Composition of orders received (FY 2007)



Orders (Unit: 100 million yen)



Comment from a Stakeholder

General Manager Technical Division
Mitsui O.S.K. Lines, Ltd.

Tsukasa Nishikawa

Responsible for environmental technologies, including energy saving technology for merchant ships, the prevention of air pollution from ships, and protection against oil spills through the use of double hull structures.

MHI, a reliable partner of Mitsui O.S.K. Lines, Ltd. Steady transfer of technology anticipatated.

Mitsui O.S.K. Lines, Ltd. has purchaseed a number of merchant ships, such as LNG carriers, container ships and very large crude oil carriers (VLCC), from Mitsubishi Heavy Industries, Ltd.. The reason that our company chooses MHI is our firm belief in the reliability and quality of MHI products. While there are many overseas products that are attractive in terms of price, the most important characteristic of a product is its performance. MHI merchant ships maintain high levels of safety, reliability and fuel efficiency while remaining very competitive in terms of value.

MHI is a partner we can trust. We, Mitsui O.S.K. Lines, Ltd., anticipate that MHI will steadily transfer its accumulated technology to the future generation.

The promotion of "a modal shift"* to other forms of transport is essential when considering environmental awareness in the transportation sector. The role of merchant ships will become increasingly more important in this sector, and they themselves are also required to be environment-friendly than ever. We have high expectations that MHI will utilize its comprehensive and extensive technical capabilities to develop ever more effective business solutions.

* To enhance distribution efficiency and reduce environmental loads, trucks that have a large environmental impact will be replaced with more energy efficient way of transportation such as railways or ships which have a smaller environmental impact.

Products that Circle the Globe and the Skies

LNG Carrier

MHI received environmental protection notation (EP notation) from the Lloyd's Register of Shipping for its LNG carrier, which was the first application to an LNG carrier in the world

H-IIA Launch Vehicle

The primary launch vehicle of Japan, the H-IIA, is responsible for next-generation space transport.

New Transportation System

This municipal, rubber tire transportation system is superior in travel safety and quietness.
The new system is a pleasant means of transportation in urban and residential areas.

F-2 Support Fighter

The F-2 is a support fighter of Japan Air Self-Defense Force for the air defence of Japan.

CNG Forklift Truck

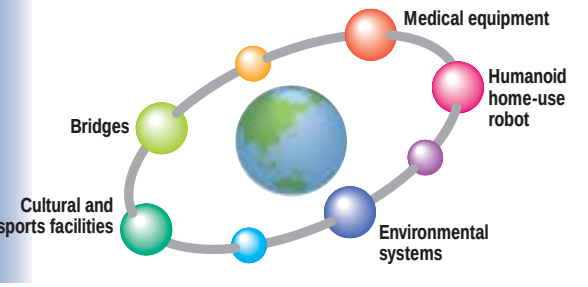
The CNG forklift employs compressed natural gas (CNG), which emits clean exhaust and is superior in economic efficiency and safety.

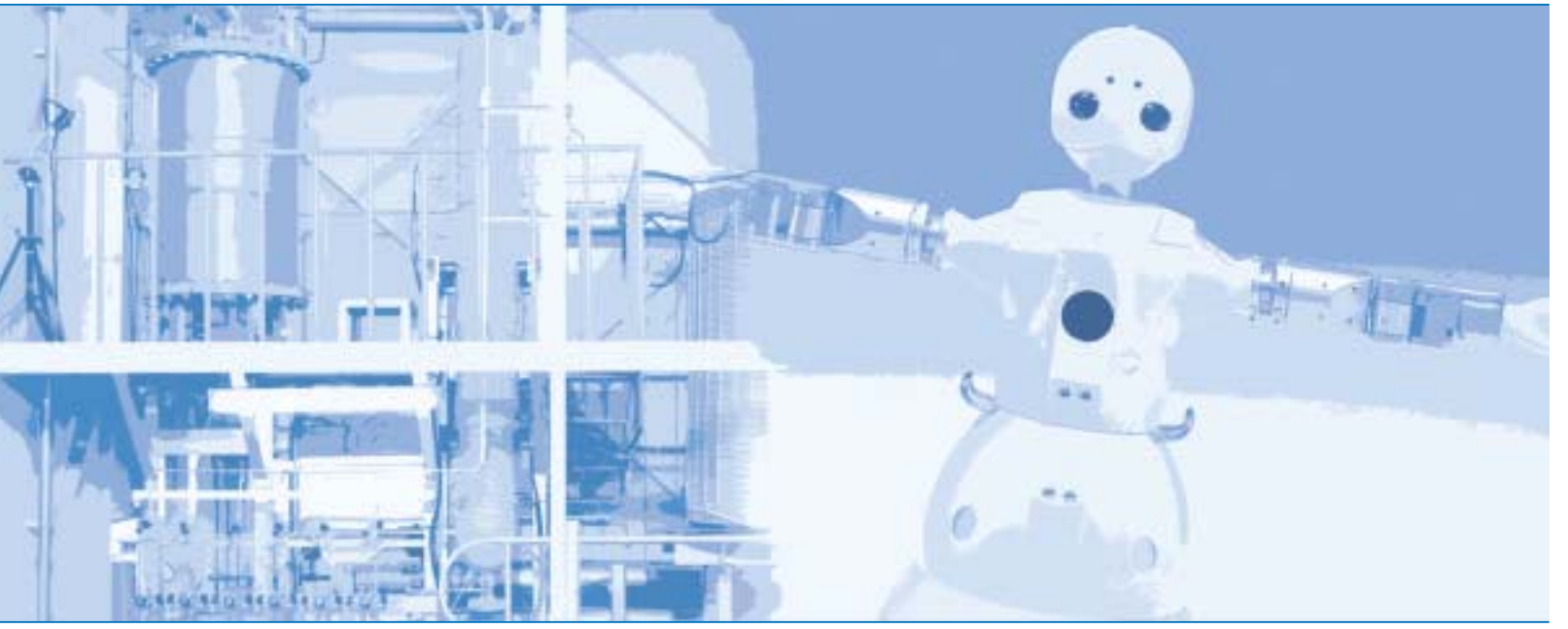
Environment & Society

Mission

Helping people lead fulfilling lives

Our Environment & Society Business





MHI's Approach

Using our manufacturing expertise, Mitsubishi Heavy Industries, Ltd (MHI) provides infrastructural products to help all the people in the world realize fulfilling lives.

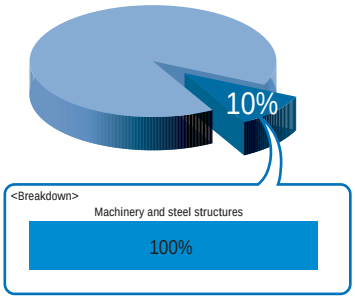
In relation to social infrastructure development, MHI deals with a wide range of materials from social bases such as steel bridges, steel pipes and tanks, hydraulic gates, tunnel-boring machinery, and other facilities to cultural, sports and leisure facilities such as multi-purpose domes and Ferris wheels.

In relation to environment conservation, starting with a PCB hydrothermal decomposition plant that completely detoxifies PCBs in heated water, we have built a track record such as the purification of PCB-contaminated soil, biomass utilization systems, next-generation waste incineration plants, flue gas desulfurization equipment, and the CO_2-recovery system from flue gas that restrains global warming and plays an important role in creating a recycle-oriented society. A rapid worsening of the environmental burden due to the economic growth of developing countries is expected on a global scale, and to solve this problem, we make our best effort to provide the products mentioned above as well as advanced technologies.

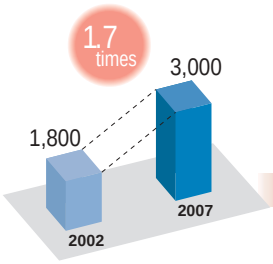
In addition, MHI is actively engaged in new businesses such as humanoid home-use robots and medical equipment to contribute to an aging, welfare society. We hope our products and technology will support affluent societies where people can live in harmony with the environment.

Medium-Term Business Plan (2004-2007)

Composition at Orders received



Orders (Unit: 100 million yen)



Comment from a Stakeholder

National Institute of Advanced Industrial Science and Technology
Energy Technology Research Institute
Leader, Distributed Energy System Research Group
Dr. of Engineering, Makoto Akai

Specialized in assessment of energy &environmental technologies, and now plays a role of Coordinating Lead Author of IPCC Special Report on Carbon Dioxide Capture and Storage.

Expectations of MHI, a top runner in preventing climate change

CO_2 capture and sequestration (CCS) technology is receiving global attention as a measure for greatly reducing atmospheric CO_2 emission. My recent research is related to assessment of energy & environmental technologies, while I have worked on CCS research since the late '80s, and I take part in writing the IPCC※ report with prominent researchers in the world including MHI researchers. MHI focused on studying CO_2 capture ahead of the rest of the world, and still realizes world-leading technology.

I believe that harmonizing the four elements of renewable energy, rational use of energy, nuclear power, and CCS is important to reduce CO_2 emission, and I would like MHI to continue to focus on developing technologies in these areas. Since there is a gap between the image that general public have of MHI and the actual figures, I suggest that MHI promote public communication to eliminate the gap.

※ Intergovernmental Panel on Climate Change

Series of products responding to the various needs of the new age

"Centerless" Ferris wheel
The world's first Ferris wheel without a center shaft creates new entertainment with its innovative, safe structure.

Flue gas desulfurization system
Eliminates more than 95% of SO_2 emitted from thermal power plants, greatly contributing to preventing air pollution

PCB treatment system
Completely detoxifies PCBs in heated water. The side products are water, salt, and CO_2 that do not require secondary treatment.

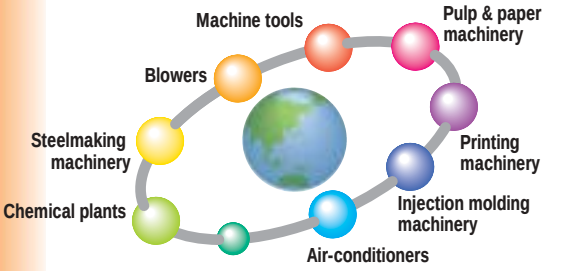
Humanoid home-use robot (*wakamaru*)
Humanoid home-use robot for domestic use responding to an aging, welfare society

Industries

Mission

Support manufacturing activities worldwide

Our business to support industries



MHI's Approach

We provide the technologies and products required for various manufacturing activities in the world.

Regarding chemical plant-related matters, not only have we engaged in the construction, equipment manufacturing, and engineering of broad range of plants such as those for petroleum chemistry, but we have also taken charge of manufacturing dimethyl ether (DME), expected as a new, "clean energy medium for the 21st century." Furthermore, we are vigorously developing innovative technology that recovers CO_2 from flue gas, a cause of global warming, and retain it under ground.

As mechanical facilities, we handle various products such as compressors, steel-making machinery, machine tools, injection molding machinery, printing machinery, pulp & paper machinery, and air-conditioners.

In relation to air-conditioning and refrigeration products, we have developed a turbo refrigerator that realizes the world's best energy efficiency as well as preventing ozone layer destruction and contributing to energy saving.

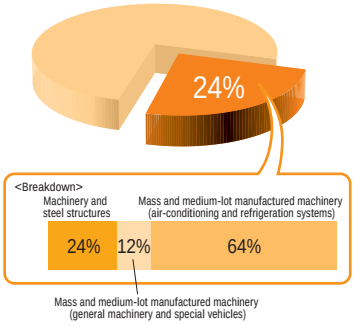
In relation to injection molding machinery, we have developed an electric motor-driven type, and have realized significant energy and space saving compared to the existing hydraulic type.

In relation to printing machinery and pulp & paper machinery, moreover, we have realized energy and resource savings by applying motor control that eliminates the drive shaft, as well as life extension by using new materials. Regarding machine tools, we have developed a complete dry-cut gear-cutting system that does not use cutting oil, and we have realized clean, safe working environments.

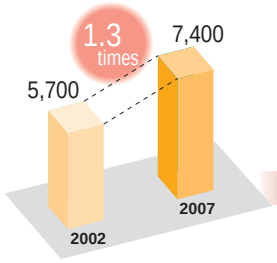
Built in various industrial sites in developing countries that show rapid economic development, the above products contribute to reducing the environmental burden of the whole world as well as to environment conservation in advanced counties.

Medium-Term Business Plan (2004-2007)

Composition of Orders Received



Orders (Unit: 100 million yen)



Comment from a stakeholder

Everbest Printing Co., Ltd.
Chairman

Thomas Chung

Chairman of one of leading printing companies in Guangdong, China. The company is introducing printing machines manufactured by MHI.

Satisfactory products and services, anticipating MHI's consideration for the environment

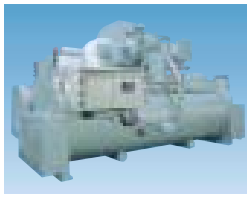
It has been 20 years since we first introduced printing machines manufactured by MHI. Before this, we used printing machines made in Germany. However, we replaced the German printing machines with those of MHI since the printing speed of the MHI's machines was about 20% faster, they were easy to operate, and the price was reasonable. Since then, we have bought 15 machines including web offset presses and sheet-fed offset presses, and we regard MHI as an old friend. We are satisfied with their services. Their customer centers are located in four cities in China, and they send their staff for repair within four hours of calling them.

We worry most about water pollution related to printing machines. After printing, a large amount of wastewater including ink and alcohol is discharged. Recently, people in China are increasingly interested in environmental preservation. As long as MHI develops environment-friendly printing machines in the same way as other manufacturers in Europe, MHI can contribute to the natural environment, and appeal to the Chinese market.

Products contributing to industrial development

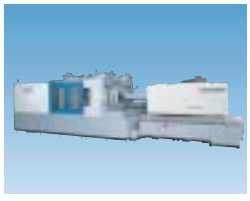
Compressor

Provide high efficiency and excellent reliability in operation. It plays an active role in Petrochemical & Refining Industries, and oil & gas fields.



Centrifugal liquid chiller

Used for air-conditioning buildings and factories, ice thermal storage, and district heating and cooling. The chiller adopts a cooling medium that does not destroy the ozone layer and significantly reduces annual electric power consumption, too.

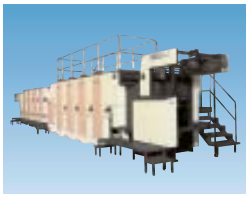


Injection molding machine

Converting plastic resin into shaped plastic products. The machine realizes significant energy saving with the help of an electric motorization. It is an environment-friendly machine without using oil.

Complete dry-cut gear-cutting system

Realizes a clean, safe environment without using cutting oil.



Printing machinery

Environment-friendly printing machine that reduces waste sheets and saves energy. The machine provides a wide variety of printed materials.

MHI's Commitment to Environmental Issues

To realize a sustainable society, MHI fulfills its social responsibility based on contribution to the environment.

A number of dangerous situations have emerged such as the rapid increase in energy consumption, the rapid increase in environmental burden such as CO_2 production, population explosion, starvation and poverty, climate change, destruction of ecosystems, and shortage of food and water.
Considering this situation, Earth Summit 1992 explicitly established the goal of perpetuating all living creatures.

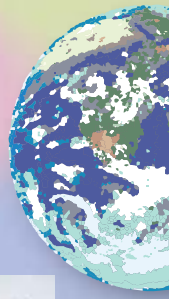
Energy Saving & Resource Saving

- Integrated coal gasification combined cycle (IGCC)
- Steam turbines
- Gas turbines
- Boilers
- Diesel engines

- Gas engine power generation
- Co-generation system
- Complete dry-cut gear-cutting system

- Centrifugal Liquid chillers
- Electric-injection molding machine

- Nuclear power generation
- Printing machinery
- Air-conditioners



- Intelligent transportation system (ITS)
  - Electronic road pricing system (ERP)
  - Electronic toll collection system (ETC)

- Air pollution prevention facilities
  - Flue gas desulfurization systems*
  - Flue gas denitrification systems
  - Electrostatic precipitators
  - Solvent recovery plants

- Water treatment facilities
  - Sewage and sludge treatment plants
  - Waste water treatment systems
  - Soil·ground water purification systems
  - Ozonizer

Air, Soil and Water Pollution

*Flue gas desulfurization systems

Refer to the following URLs regarding SOx removal technologies contributing to acid rain measures that are effective in protecting forests.
http://www.mhi.co.jp/mcec/ja/product_j.htm
http://www.sdia.or.jp/mhikobe/index.html

To achieve this goal, we make efforts to develop and provide highly reliable, unique technologies and products. In this special feature, we report the contribution of our activities to the environmental field.

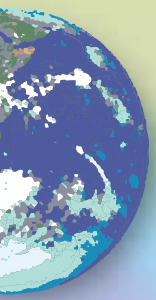
Countermeasures against Global Warming

CO_2 recovery/underground retention system

Renewable energy

Wind turbine plants　Photovoltaic systems
Water turbine plants　Biomass power generation
Geothermal power systems

CNG forklift truck



Fuel cells

PCB treatment systems

Waste incinerators

Waste treatment facilities
Night soil treatment systems
Recycling system
Food residue dryer

LNG carrier

Desert greening project

Contribution to recycling-oriented society

Greening of Deserts

Pages 19 to 24 focus on "nuclear power," "CO_2 recovery," and "renewable energy," all of which are countermeasures against global warming among our various activities relating to the environment.

Nuclear Power

Ensuring Safety while Responding to Energy Demands

Global warming and oil depletion but increasing demands for energy: How do we overcome these two conflicting issues in modern society?

There are various means of supplying energy in today's world: fossil fuel, hydraulic power, nuclear power, wind power, solar energy, geothermal power and biomass, to name a few. Each technology has its own merits and demerits, and none of them can meet all of today's energy demands alone. The most suitable combination, i.e., "the optimal mix," must be identified for each country and region.

As a measure against global warming and to secure energy, MHI offers nuclear energy as an effec-tive option. MHI's nuclear power activities are presented below.

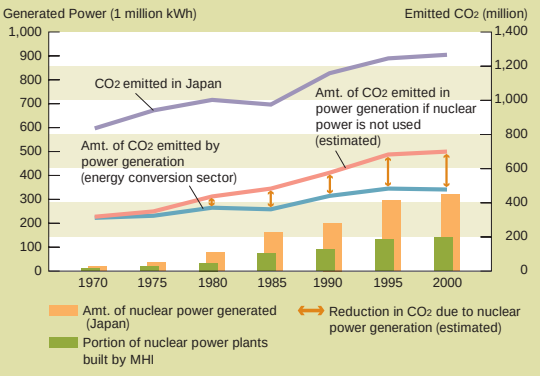
Merits and Demerits of Nuclear Power Generation

Nuclear power generation refers to harnessing thermal energy produced from the fission of uranium to create steam, and using this steam to drive a steam turbine to generate power. Nuclear power plants are operated and managed by power companies, and MHI manufactures the equipment for these companies.

With nuclear power generation, a great quantity of heat can be produced using a small amount of resources. Because nuclear power generation does not use fossil fuels, CO_2 is not emitted. For this reason, Japan and other countries consider nuclear power to be a major measure against global warming. On the other hand, nuclear power generation produces waste that emits radiation, making waste management a critical issue.

At present, some countries such as Sweden, Germany and Italy rely on France for nuclear power generation and have made it a policy to import nuclear energy, while other countries such as China and Korea are promoting domestic nuclear power generation.

Reduction in CO_2 Emissions by Nuclear Power Generation (Japan)



Note * In estimating the amount of CO_2 emitted if nuclear power were not produced, the alternative was oil-fired power.
* Source: the Agency for Natural Resources and Energy, Japan.

Mihama Nuclear Power Plant

To date, MHI has built 23 nuclear power plants, equivalent to a capacity to generate approximately 20 GW (gigawatt) of electricity. MHI is responsible for the design, manufacture and construction, and makes every effort to improve nuclear power safety and reliability.

Inside a Nuclear Power Reactor Vessel

Equipment such as the reactor vessel and the steam engine are the heart of the nuclear power plant. This is a photograph of the inside of a 1,000-MW (megawatt) reactor vessel. This power plant alone supplies sufficient electricity for approximately 2 million households.

Global Warming and Nuclear Power

In its report of 2001, the Intergovernmental Panel on Climate Change (IPCC) predicted that the average temperature of the Earth will increase by between 1.4 and 5.8 degrees Celsius by 2100 due to the increase in the concentration of greenhouse gases such as CO_2. If this prediction becomes reality, not only will there be coastal area flooding due to the rise in seawater level, but there will also be adverse effects on agricultural production, the occurrence of natural disasters such as flooding and drought due to climate change, and the spread of infectious diseases, thereby significantly affecting the lives of everyone.

Today's global warming is mainly caused by CO_2 emissions resulting from factors such as energy consumption by industrialized nations. In the 3rd Session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP3) that took place in 1997, the Kyoto Protocol was adopted, and goals for greenhouse gas reduction were set for each country. However, there is a limit to the amount of energy that can be reduced. To prevent global warming, partial replacement of fossil fuels with alternative energy sources is necessary. MHI considers nuclear power, a type of energy that does not emit CO_2, an effective option.

Stable Energy Supply and Nuclear Power

Fossil fuels are becoming problematic; oil and natural gas are expected to be depleted by the next century, and great amounts of CO_2 and SOx are emitted from coal. Hydraulic power, while a recyclable resource, may greatly affect ecosystems due to dam development and is limited to areas rich in water resources. In addition, natural energies such as wind power, solar power, geothermal power and biomass cannot at present sufficiently respond to the energy demands of the world, even though MHI is involved in developing and supplying related equipment.

On the other hand, according to the International Energy Agency (IEA), the world's energy demand is expected to increase by 57% by 2010 compared to the 1997 figure due to the rapid increase in the power requirements of emerging countries and developing countries.

An assured, stable energy supply around the globe will be difficult to achieve without the use of nuclear power.

Ensuring Nuclear Power Safety

For nuclear power to remain a source of energy, safety must first be ensured. On the premise that machines fail and human beings make mistakes, we have constructed numerous layers of countermeasures to ensure that if an accident does occur at a nuclear power plant, the area outside the plant will not be affected.

These efforts do not end with completion of the plant construction. Instead, we have set up a framework in which information on any problems, regardless of scale, is immediately shared amongst all nations, and countermeasures are put in place accordingly.

The 21st century has brought with it a global trend in reevaluating nuclear power as a measure against global warming, with Europe and the United States making increasing efforts to update the various equipment used at their respective nuclear power stations.

Working to Ensure a Correct Understanding of Nuclear Power

Nuclear Power PA Center
Nuclear Energy Systems Headquarters,
Public Relations Center Manager

Takashi Saito

Our company's nuclear power plants are constructed at the same technological level as the H-IIA rocket and the Shinkai 6500 research submarine, and incorporate all possible safety measures. However, nearly everyone, including MHI personnel, is unfamiliar with nuclear power. To deepen public understanding, our organization conducts public acceptance (PA) activities.

Through nuclear power plant excursions and presentations, we try to inform the public of the necessity for nuclear power generation and the related safety measures taken, presenting advanced technological explanations according to the target audience.

We want to hear from you!

It is important that we keep an open dialogue regarding nuclear power generation. Please feel free to contact us with your ideas and opinions.

Mitsubishi Heavy Industries,
Nuclear Energy Systems Headquarters
Nuclear Power PA Center
Email: genshiryoku-pa-center@mhi.co.jp

CO_2 Recovery

Recovered CO_2 Utilization

Today, we are facing global warming, a serious environmental problem. What measures are effective in solving this problem?

Let us think about the causes of the global warming. Green house gases include CO_2, methane gas, and chlorofluorocarbon, and among these gases, CO_2 is said to contribute to about 60% of global warming. CO_2 is in most cases emitted by the combustion of fossil fuel, and a particularly large amount of CO_2 is emitted from thermal power plants. That is, it would be very effective if CO_2 generation from the thermal power plants were reduced. However, it is currently difficult to restrain the operation of thermal power plants because the demand for electric power is globally increasing.

Is it possible to recover the CO_2 already emitted? With Kansai Electric Power Co., Inc. (KEPCO), MHI has developed a technology for recovering CO_2 emitted mainly from power-generation plants since 1991. In this section, we show you the entire picture of CO_2-recovery technology and the ability to solve the problem of global warming.

How can CO_2 be recovered?

As concern over global warming increases, CO_2-recovery technology is starting to receive world attention, and the Intergovernmental Panel on Climate Change (IPCC) is also discussing this technology. CO_2 recovery from natural gas is well known, but CO_2 recovery from flue gas has not been conducted widely since it is technically very difficult and not much demand in early 1990's. The following methods can be listed as methods of CO_2 recovery from exhaust gas: the chemical absorption method that assimilates CO_2 in fluid, the physical adsorption method that adsorbs CO_2 to solid adsorption agents, and the membrane method that separates CO_2 using polymer membrane.

KEPCO and MHI researchers selected the chemical absorption method. This choice worked well. Since the method is similar to the flue gas desulphurization technology, we were able to realize facility-scale expansion.

The technology first cools hot flue gas from a thermal generation plant to a temperature appropriate for CO_2 absorption. The cooled flue gas then comes into contact with an amine series liquid solution to absorb the CO_2. After heating the absorbing solution with steam, nearly 100% pure CO_2 can be extracted.

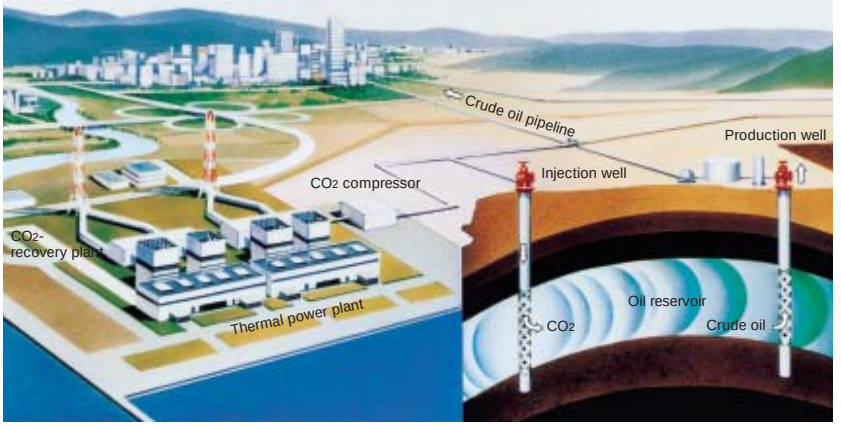


Image picture of enhanced CO_2-recovery method from thermal plant flue gas

The oil recovery ratio can be significantly increased by injecting CO_2 into the oil field. Combining this injection method with our recovery method of CO_2 from thermal plant flue gas, we can simultaneously realize the long-term, stable provision of oil resources and countermeasures against global warming.

The Accumulation of MHI's Technologies is Utilized

When our researchers started developing CO_2-recovery technology from exhaust combustion gas, society paid attention. However, overseas electric power companies thought that the technology could not be realized as a countermeasure against global warming. Our researchers studied various methods to lower cost. By improving the absorbing solution, we enhanced the CO_2 absorption rate to more than 90%, reduced the amount of energy required for CO_2 recovery, and pursued economy of scale by increasing the size of the plant. Through more than ten years of researchers' efforts, they finally succeeded in making the technology practical.

The technology of recovering CO_2 from exhaust combustion gas applying the chemical absorption method has been receiving global attention, and development of this technology was also launched in Europe and U.S.A. in 2000.

How Should Recovered CO_2 be Used?

Recovered CO_2 has conventionally been used to produce carbonated drinks, soda ash, and urea. Use for food products and chemicals like these are very limited in volume, and it does not reduce the amount of CO_2 in the air. To reduce CO_2 in the air, there are the following methods: the "subterranean sequestration" that injects CO_2 into underground aquifers and coal seams, and "oceanic disposal" that disposes of CO_2 into the ocean. However, simple subterranean sequestration is not economical, and some people worry that oceanic disposal may adversely affect the environment. Therefore, we promoted the enhanced oil-recovery (EOR) method that the increases the oil-recovery ratio using CO_2.

Concurrently Solving the Problems of the Depletion of Energy Resources and Global Warming

EOR is a technology that improves crude oil recovery ratio in oil reservoirs by injecting CO_2. When CO_2 is injected into the oil reservoir, CO_2 is dissolved into the crude oil, and it significantly reduces oil viscosity and increases flow ability. As a result, the recovery ratio of crude oil increases by 40%. Combining this EOR with CO_2 recovery, we can concurrently realize a reduction in CO_2 emission and enhancement of oil recovery. We are currently designing a plant that recovers 3000 tons of CO_2 per day for oil-producing countries in the Middle East. The plant also utilizes EOR.

We are also evaluating the economic viability of EOR in a thermal power-generation plant in Vietnam. It is expected that the Bach Ho oilfield, the largest oilfield in Vietnam, will be depleted in the future. If CO_2 emitted from the neighboring power-generation plants are recovered and injected to the oilfields, it will contribute to environmental protection and economic development in Vietnam.

Hereafter, we will look for areas suitable for the CO_2-recovery business, and develop CO_2-recovery business there. If the Kyoto Protocol becomes effective, the economic viability of this technology will further improve due to CO_2 emission trading.

Utilizing our integrated technologies, we will extensively focus on countermeasures against global warming from recovery to sequestration.

Comment by a staff member in charge

Machinery Headquarters
Plant and Transportation Systems Engineering & Construction Center
CO_2 Business Promotion Group Leader
Masaki Iijima

In 1991, we started developing CO2-recovery technology from flue gases in conjunction with Kansai Electric Power Co., Inc. (KEPCO), while no other companies were working on CO2 recovery at this time because they thought there would be no demand for it.

Many overseas visitors came to our test plant, and they were amazed.

Now CO2-recovery technology is receiving world attention. I believe that KEPCO, who offered joint development of the technology with us, have foresight. We would like to expand the business, further improving business efficiency.

Urea production plant utilizes CO_2-recovery technology

In a urea plant delivered by MHI, recovered CO_2 is effectively utilized for various applications.

Renewable Energy

Shifting to Sustainable Energy

The world is expecting natural energy to be a countermeasure against global warming and depletion of oil resources. Natural energy such as biomass, wind power, solar power, small-scale hydropower and so on reduces the effect on the environment and is reutilized through natural circulation. It emits hardly any CO_2 or toxic materials and moreover contributes to local revitalization.

Natural energy, however, currently makes up only 4% of the total supply of the primary energy in OECD countries. In some advanced countries, natural energy makes up a significant rate of the primary energy supply, as in Iceland where 60% of the primary energy is supplied by geothermal power. Now, the practical application of natural energy is being enhanced on a global scale as an environmentally- and economically-contributing energy.

MHI has been working on development of various natural energy technologies. In this section, we introduce wind power and biomass, both of which are expected for the future.

Rapidly Expanding Wind Power-generation Areas by Converting their "Archenemy," Strong Wind, into "Resources"

Wind power generation is the most rapidly diffusing technology among various natural energies. The world's wind power-generation capacity has increased by more than six times over the past eight years. The European Wind Energy Association estimates that 12% of the total electric power demand in the world can be covered by wind power generation in 2020. Wind power generation is expected to expand from now on.

We have been working on the development of the wind power generator since 1980. We have already delivered 1,758 generators to various countries in the world. Our wind power-generation business is expanding particularly in recent years, and the orders received in 2003 doubled compared with the previous year.

Wind power generation contributes to local revitalization as well as preventing global warming. The wind power-generation business in Seto Town, Ehime Prefecture, funded by us, is an example of such a contribution. Seto Town has suffered from strong winds for years. They wondered if there was any way to live with their archenemy, or strong winds. After a lot of thought, the town finally focused on wind power generation. The town started studying the introduction of wind power generation in the 1980s, and established the first generator in 1990. In October 2003, eleven generators with a 1000-kW capacity started operation.

The operating body is Seto Windhill Corporation. The company was established with a 90% stake by us and the remaining 10% stake by Seto Town. The power-generation capacity of wind power-generation facilities is 11,000 kW. Power can be provided to 6,850 households. It is the largest-scale wind power-generation facility in the Shikoku and Chugoku Regions. The town is planning town development where wind power-generation facilities are used as the symbol.

The town says that visitors and the sales amount of commercial museums have increased after operation start-up of wind power generation.

We wish to expand our wind power-generation business by four to five times the current scale in a few years time. We are also considering business development in China where a sharp increase in electric power demand is expected.

Seto Windhill

MHI took charge of designing and manufacturing the windmills, civil engineering work for installation, related electric facilities, installation, and relevant electric work as full-turnkey work. One of the eleven windmills we introduced is the latest; it has long blades and can effectively generate electric power even in mild wind.

Contributing to Local Communities Utilizing Biomass Power Generation, Aiming for a Recycling Society

Biomass is currently the most supplied natural energy.

Biomass is a general term for animals and plants resources and waste materials stemming from these resources. Combustion, fermentation, and gasification of biomass can produce energy such as heat and electricity. Since CO_2 emitted during combustion is fixed or absorbed while such animals and plants are growing, the amount of CO_2 emission is regarded as zero, and biomass is thought to be effective for CO_2 reduction in that it can be used as an alternative to fossil fuel.

In OECD countries, biomass makes up 80% of the total supply of natural energy. According to the scenario announced by EU, biomass is expected to supply 8.5% of the total energy consumption in 2010.

Our company has been working on the development of various biomass energy technologies as countermeasures against global warming. In 2006, the gasified biomass power-generation business is expected to start in Iwate Prefecture. This business has constructed a biomass power-generation plant in Koiwai Farm, located in Shizukuishi Town, Iwate Prefecture, where livestock waste and food residuals are utilized. The body operating the business is "Biomass Power Shizukuishi Corporation." The company was jointly established based on investment by Koiwai Farm, MHI, Tohoku Electric Power Engineering & Construction Co., Ltd., Tokyo Sangyo Co., Ltd., and Shizukuishi Town, and it is the first private company to engage in the biomass business in Japan.

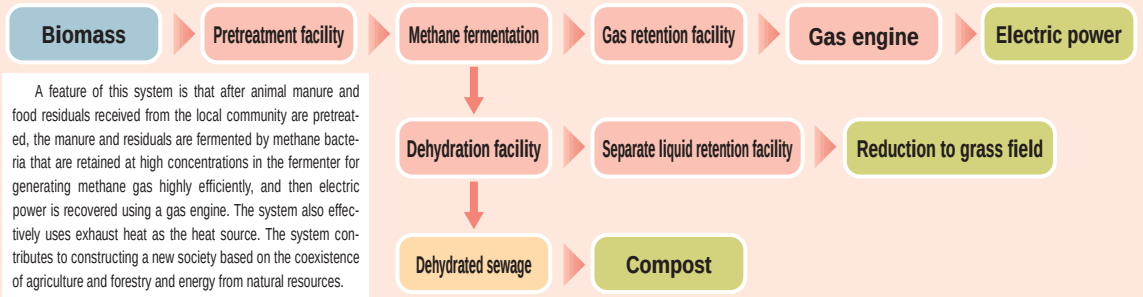
The business collects livestock waste discharged from the farm and food residuals discharged from food companies nearby and local elementary and junior high schools, and they are fermented by methane bacteria. Using generated methane gas, 4 MW of electric power is generated per day. Half of the electric power is used inside the facility, and the residual power is sold to Koiwai Farm. Not only is electric power generated in the plant, but exhaust heat at the time of generating power is used in the livestock waste-composting facility, and the generated compost is sold to Koiwai Farm. Digestive fluids left after methane fermentation are used as liquid fertilizer on Koiwai Farm.

This business does not only create a mechanism for recycling resources and energy but also has social significance. That is, the business contributes to reducing waste materials as well as preventing global warming. Since it creates industries and attracts many inspectors and tourists as well as contributing to reducing the environmental burden and suppressing global warming gas emission, it consequently contributes to local revitalization. Moreover, the business contributes to a recycling-oriented agriculture in that it uses safe, secure compost and liquid fertilizer for agriculture.

Many advantages can be expected from the gasified biomass power-generation business. We expect further development in the future.

There are efforts to create an economy based on environmental conservation by setting natural energy at the core. The world anticipates this challenge that we must take up.

Methane fermentation and power-generation system



A feature of this system is that after animal manure and food residuals received from the local community are pretreated, the manure and residuals are fermented by methane bacteria that are retained at high concentrations in the fermenter for generating methane gas highly efficiently, and then electric power is recovered using a gas engine. The system also effectively uses exhaust heat as the heat source. The system contributes to constructing a new society based on the coexistence of agriculture and forestry and energy from natural resources.

Comment by a staff member in charge

Machinery Headquarters
Environmental Solutions Department
Business Promotion Group
Yoshihiro Yamazaki

This biomass power-generation business was first offered to Koiwai Farm as an effective scheme for recycling livestock waste. At that time, the farm was seeking a way to treat livestock excrement appropriately. The system does not only compost livestock excrement, it also tries to utilize biomass energy, effectively combining methane fermentation with organic food residuals and composting facilities.

The business realizes a recycle-oriented society and a new energy policy in the local society. In addition, it can be a business leading to solutions to customers' problems. The business is a unique proposal by our company that makes most of the highly integrated technology skills and business expertise in handling various waste treatment facilities.

Since this was the first time in Japan that an entity led by private companies launched a combined biomass business of livestock and food waste with financial backing from the government and the prefecture, we encountered various difficulties. However, thanks to the understanding of many people of the government, prefecture, and town, and the cooperation by invested entities, we were able to realize the business.

Koiwai Farm is a famous tourist spot in the north Tohoku region, with about 800,000 visitors every year. It is a large, beautiful pasture spreading at the foot of the epic Mt. Iwate. I strongly recommend you visit for both environmental study and pleasure.

Business Outline

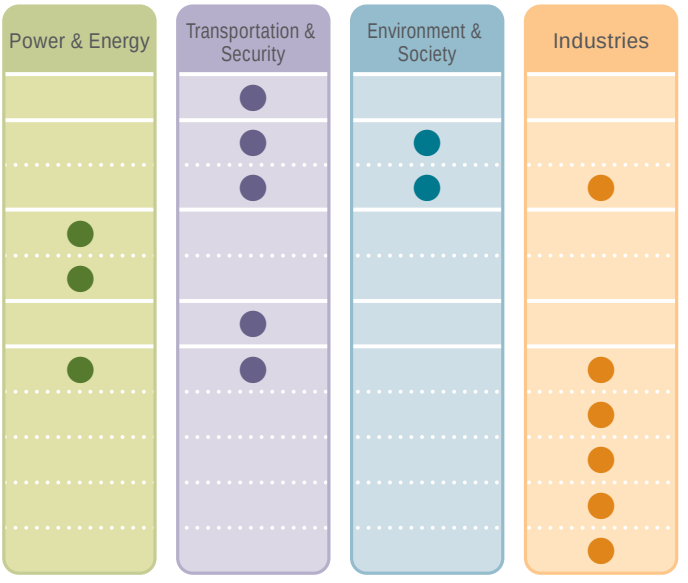
Business Outline

MHI divides its various products into eleven headquarters and divisions, and develops operation in individual headquarters and divisions. These headquarters and divisions are broadly classified into five segments (shipbuilding & ocean development, power systems, machinery & steel structures, aerospace, and mass and medium-lot manufactured machinery). On the other hand, we divide the business departments into four categories; "Power &Energy,""Transportation&Security," "Environment&Society,"and"Industries," and aim for "MHI, a Premier Global Organization" contributing to the safe, fulfilling lives of the people worldwide.

Since we need to develop stable business overseas particularly from now, we will expand the authority, functions and workforces of the local offices to enhance local manufacturing bases.

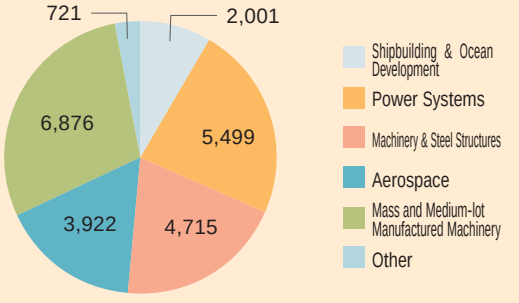
Relationship between four business categories and each of the headquarters, divisions and segments

Segment	Headquarters and Divisions
Shipbuilding & Ocean Development	Shipbuilding & Ocean Development Headquarters
Machinery & Steel Structures	Steel Structures & Construction Headquarters
	Machinery Headquarters
Power Systems	Power Systems Headquarters
	Nuclear Energy Systems Headquarters
Aerospace	Aerospace Headquarters
Mass and Medium-lot Manufactured Machinery	General Machinery & Special Vehicle Headquarters
	Air-Conditioning & Refrigeration Systems Headquarters
	Industrial Machinery Division
	Paper & Printing Machinery Division
	Machine Tool Division

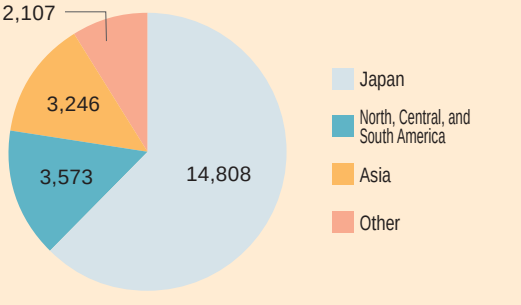


Sales by segment and by region

Sales by industry segment in 2003 (Unit: 100 million yen)



Sales amount by region in 2003 (Unit: 100 million yen)



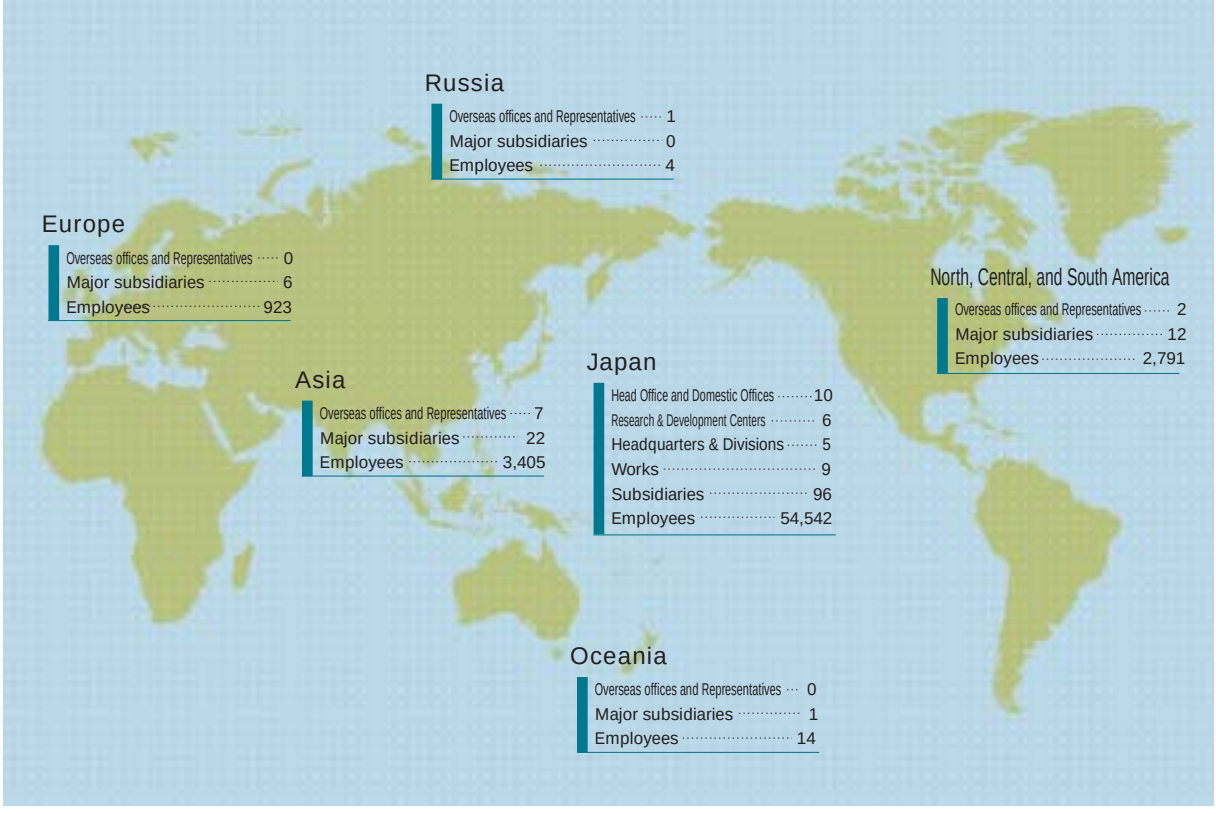
Statement of Accounts (Consolidated)

(Unit: 100 million yen)

	1999	2000	2001	2002	2003
Orders received	23,498	26,403	24,249	24,809	26,628
Net sales	28,750	30,450	28,639	25,938	23,734
Operating income (loss)	−237	748	786	1,153	666
Net income (loss)	−1,370	−203	264	343	217
Total assets	46,367	42,366	39,152	36,668	37,153
Net assets	12,450	12,782	12,827	12,709	13,244

Number of offices and employees by region

As of December, 2003



Administrative Organization

Corporate Governance

Approach to promoting fair and sound administration

MHI makes efforts to promote fair and sound management premised on the abidance of the law. MHI is taking a number of initiatives to enhance management efficiency and strengthen compliance, including reforming the management system to allow more effective decision-making in response to radical changes in the economic environment. The Group is also working to make management more transparent by disclosing information rapidly and accurately to shareholders and other external stakeholders.

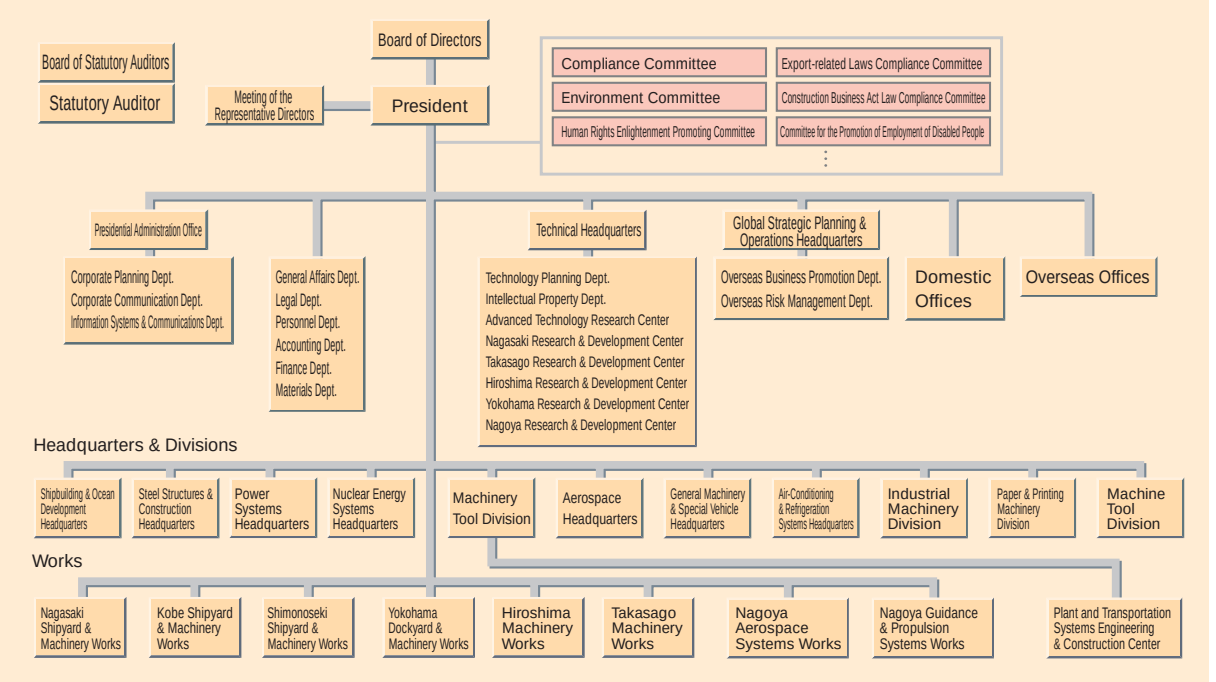
Creating a more efficient executive framework

In order to enhance management efficiency, all managing directors have been given the authority of representative directors. This devolution of authority is aimed at ensuring more effective, flexible management. Furthermore, discussions on important management decisions under consideration are held in meetings of the representative directors, resulting in a framework that leads to more appropriate management decisions and business execution.

Appointing outside directors and corporate auditors

For some time, MHI has sought to strengthen manaegement oversight functions through the appointment of outside directors and corporate auditors. Currently, of the 28 directors, one is from outside MHI, while two of the four corporate auditors are external appointments. None of external directors or auditors has conflicts of interest with MHI.

Organization Chart



Ethical-Legal Compliance

We are socially responsible for Ethical-Legal Compliance (hereinafter referred to as "compliance"), and work hard so that individual employees comply with laws and social rules, implement their business fairly and faithfully, we gain confidence from society, and develop soundly and sustainably.

MHI Compliance Guideline

With the idea, "We base our activities on honesty, harmony, and a clear distinction between public and private life," one of our management creeds, we have promoted business activities fairly and faithfully. As a more specific activity guideline, we established the "MHI Compliance Guideline" (referred to on Page28) in September 2001, and distributed the guideline to all board members and employees.

The guideline consists of three items: I. business activities, II. relationship between company and society, and III. relationship between company and employee, and each item is regulated as the standard of behavior in implementing business activities.

For the self-declaration of individual employees, the guideline has a space for a signature. We request that employees keep the guideline at hand to check whether they are in accordance

with laws and rules and whether they are fair and faithful when they act as our staff. By doing so, we let them cultivate awareness.

Compliance System

We established the Compliance Committee, an organization directly controlled by the president in May 2001, to promote fair, faithful business activities, based on compliance. The committee is headed by the managing director in charge of compliance, and consists of corporate department heads as members. The committee develops various measures to promote compliance throughout the company.

Compliance Promotion Activities

To familiarize all staff with compliance activities, we have specifically developed the following activities:

We provide all executives at the managerial level or above with the "Compliance Guideline for Managers," and hold compliance seminars based on the guideline so that executives can instruct their subordinates in their sections.

We have also introduced compliance education in training for each staff rank, such as training for newly appointed managers and for new employees every year. In addition, last year, we newly started compliance promotion training on a discussion basis, where the superior of each department trains the subordinate staff based on actual examples. We will continue this new training. The training is attended by all staff including board members, and it aims to enhance compliance by improving the awareness of individual staff as well as introducing an understanding of compliance.

Hotline System

We set up a hotline and a dedicated contact in the Compliance Committee Office in June 2001 so that inappropriate acts in terms of compliance can be uncovered as early as possible, and rectified through the initiative of the company itself. The office accepts letters and comments from employees, affiliated companies, and material suppliers.

Once they receive such letters and comments, the Compliance Committee immediately investigates the problem. If the Committee finds anything inappropriate, they will correct it. To protect informers, we give them special consideration so that they are not treated unfavorably.

To date, the committee has received well over one hundred letters and calls, and the system has proven itself to works well to prevent problems and to help the company make its operations more compliance-oriented.

Other efforts

For overseas businesses, for example, relevant matters will be discussed by the Export-related Law Compliance Committee and then responded to so that we follow the appropriate laws and behave appropriately. In this way, we take a suitable approach to handling individual laws.

In spite of our approach, we were regrettably punished by the government authorities in relation to the Construction Business Act last year. After this, we immediately set up the Construction Business Act Compliance Committee, promoting awareness of compliance to all staff, and we have discussed and promoted company-wide preventive measures.

In this way, we make efforts to further enhance compliance by improving and progressing compliance awareness and making appropriate responses to individual laws as important pillars of our activities.

MHI Compliance Guideline

I Business activities

We will conduct sensible company activities in compliance with laws and in an appropriate manner as well as contribute to society by providing safe, high-quality products and services.

1. We will make efforts to provide safe, high-quality products and services.
2. In conducting business activities, we will pursue fair and free intercorporate competition in compliance with the Antimonopoly Act, and Act against delay in payment of subcontract proceeds, etc. to subcontractors, the Construction Business Act, and other relevant regulations.
3. Regarding gift giving and entertainment with civil officers and suppliers, we will not violate laws or deviate from socially accepted practices.
4. We will implement appropriate accounting and tax accounting in accordance with relevant laws, accounting standards, and internal regulations.
5. In relation to overseas business, we will follow laws related to import and export and local laws.

II Relationship between company and society

We will try to preserve the environment and live in harmony with society as a good corporate citizen.

1. We will follow environment-related laws, and try to preserve the environment.
2. We will disclose information related to the management appropriately in a timely manner.
3. We will not make political donations exceeding the amount stipulated in the regulations.
4. We will respond firmly to antisocial forces.

III Relationship between company and employees

The company will secure a safe, healthy work environment, and company members shall make a clear distinction between public and private, complying with laws and internal rules, and execute their duties faithfully.

1. The company will follow labor-related laws and try to secure a safe, healthy work environment.
2. Company members shall follow internal regulations such as labor regulations.
3. Company members shall not engage in discriminative behavior or sexual harassment.
4. Company members shall handle company secrets appropriately, and shall not disclose them without prior consent.
5. Company members shall not conduct unfair stock trading (insider trading).

Environmental Management System

MHI has contributed to society through manufacturing products since its foundation. MHI is working on two aspects; one is to decrease the burden on the environment involved in manufacturing its products, and the other is to develop technology that contributes to solving the problems of the environment and energy. In 1996, we established the Environment Committee to further contribute to society and for the harmonious coexistence of people and the natural environment. The environmental management system is constructed in accordance with the "Basic Policy on Environmental Matters" and the seven items of the "Conduct Guidelines" established by the company.

Basic Policy on Environmental Matters

In order to make the sustainable development of society possible, a basic policy on environmental matters has been established.

Pursuant to the express provision of Section 1 of its creed that "We strongly believe that customers come first and that we are obligated to be an innovative partner to society," MHI shall, as a matter of primary importance, strive, through its R&D, manufacturing and other business activities, to play a useful role in the development of society.

To this end, while remaining aware that a business enterprise is a member of society, MHI shall endeavor, in all aspects of its business activities, to reduce the burden on the environment and shall concentrate and fully utilize its technological capabilities for the development of technologies and products that will protect the environment, thus contributing to the establishment of a society in which sustainable development is possible.

Conduct Guidelines

In order to realize the basic policy, the following seven conduct guidelines have been set.

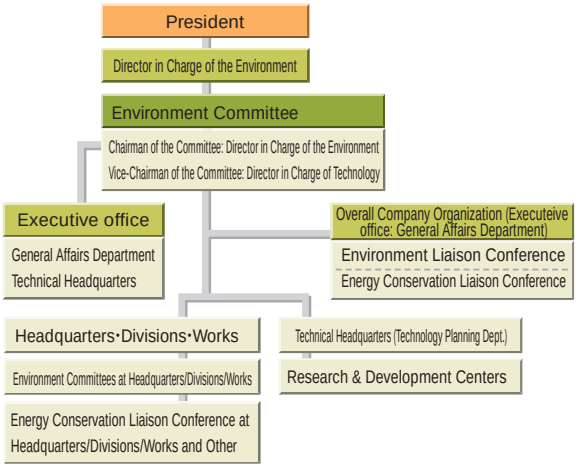
1. Recognize that environmental protection is top priority in the company's operations, and encourage the entire company in its endeavors to protect and improve the environment.
2. Define roles and responsibilities regarding environmental protection by developing and maintaining a corporate organization designated for environmental protection, and create and implement corporate policies and procedures on environmental matters.
3. Endeavor to reduce the burden on the environment by preventing pollution, saving resources, saving energy, reducing waste, reusing materials, and recycling in all aspects of the company's business activities in R&D, designing, procurement of materials, manufacturing, transportation, use, service and disposal.
4. Endeavor to develop and provide advanced, highly reliable, unique technologies and products that contribute to solving environment and energy problems.
5. Comply with national and local environmental laws and regulations, beyond mere compliance by enacting, implementing, and evaluating voluntary standards where necessary, and to endeavor to continually improve and promote environmental protection activities by establishing environmental goals and targets.
6. Endeavor to protect the environments of foreign countries by carefully examining the consequences of the company's overseas business operations and the exportation of its products, and to become actively involved in technological cooperation overseas in the area of environmental protection.
7. Provide environmental training and other programs to enhance environmental awareness of all company employees, and take steps to expand public relations activities, such as providing environment-related information to the public and social contribution activities.

Environmental Management System

We established the "Environment Committee" in 1996 in order to clarify our approach to environmental protection. This committee plans and prepares the annual environmental policy of the entire company to determine the direction of its activities, and follows up the annual plan prepared by respective headquarters, divisions and works on environmental protection.

In addition, in accordance with company policy, each of our headquarters, divisions and works prepares and promotes an action plan incorporating the characteristics of respective areas and the special features of production activities. The following organizations have been established to execute these activities: "Headquarters/Divisions/Works Environment Committee," "Headquarters/Divisions/Works Environment Liaison Conference," and "Headquarters/Divisions/Works Energy Conservation Liaison Conference."

Environmental Protection Organization



Introduction of the Environmental Management System

Starting with the Yokohama Dockyard & Machinery Works, which obtained ISO14001 certification first among Japanese companies engaged in heavy industry, all 15 headquarters/divisions/works of MHI obtained ISO certification. Striving to continuously improve the environmental management system and operate the PLAN-DO-CHECK-ACTION (PDCA) cycle smoothly, we have been renewing ISO certification without fail.

As a result of these efforts, the burden on the environment of our production sites is decreasing significantly every year, and examiners from external organizations are rarely left unsatisfied.

Our affiliated companies are introducing an environmental management system, with domestic companies targeting completion by March 2005 and overseas companies by March 2006.

Acquisition of ISO14001 Certification

	Site	Issue Date (Registration date)
MHI Production Site	Yokohama Dockyard & Machinery Works	October 31, 1997
	Nagasaki Shipyard & Machinery Works	May 22, 1998
	Takasago Machinery Works	June 26, 1998
	Air-Conditioning & Refrigeration Systems Headquarters	November 20, 1998
	General Machinery & Special Vehicle Headquarters	May 21, 1999
	Paper & Printing Machinery Division	September 3, 1999
	Plant and Transportation Systems Engineering & Construction Center (Mihara)	September 3, 1999
	Hiroshima Machinery Works	September 30, 1999
	Shimonoseki Shipyard & Machinery Works	November 24, 1999
	Nagoya Guidance & Propulsion Systems Works	December 18, 1999
	Kobe Shipyard & Machinery Works	February 18, 2000
	Industrial Machinery Division	April 1, 2000
	Machine Tool Division	December 28, 2000
	Plant and Transportation Systems Engineering & Construction Center (Yokohama)	June 29, 2001
	Nagoya Aerospace Systems Works (*1)	October 1, 2003
Domestic Subsidiaries	Ryomei Engineering Co., Ltd.	August 28, 1998
	Mitsubishi Agricultural Machinery Co., Ltd.	July 24, 2001
	Nagoya Ryojukosan Co., Ltd.	March 14, 2002
	Nishi-Nihon Ryojukosan Co., Ltd.	May 14, 2003
Overseas Subsidiaries	MHI Equipment Europe B.V. (Holland)	November 9, 2001
	Mitsubishi Heavy Industries Climate Control Inc. (U.S.A.)	June 12, 2003

MHI: certification obtained by all of 15 manufacturing bases
Domestic subsidiaries: certification obtained by 4 of 89 companies (*2)
Overseas subsidiaries: certification obtained by 2 of 35 companies

*1
In the Nagoya Aerospace Systems Works, the three respective certifications of the Tobishima Plant (issued on March 27, 2000) and the Oe and Komaki-Minami Plants (both issued on August 8, 2000) were integrated into one in 2003 when the certification was renewed.

*2
There are 89 companies among the 96 domestic affiliated companies whose accounts must be consolidated with that of MHI, excluding the seven following companies:
Ryoju Steel Manufacturing Co., Ltd./MHI Air-Conditioning & Refrigeration Systems Equipment and Material Co., Ltd./MHI Yokohama Power Co., Ltd.,/ Shonan Monorail Co., Ltd.,/ Seto Windhill Co., Ltd./Ryoju Special Vehicle Service Co., Ltd./ MHI General Machinery Service Co., Ltd.

Compliance with Environmental Law

In June 2003, in the Hiroshima Plant of our Machine Tool Division, the regular inspection of the waste water outlet of the plant by the Sewerage Bureau of Hiroshima City found emission of 0.34 mg/L dichloromethane, a substance designated as a specially controlled waste. The emission level exceeded the wastewater quality standard value of 0.2 mg/L.

Regarding this violation of the Sewerage Law, we received a recommendation for improvement from Hiroshima City, and we submitted a "Water Quality Improvement Plan" and a "Water Quality Improvement Report" to Hiroshima City in August 2003.

We ensured that the people of the respective works and affiliated companies were aware of this case, and we conducted surveys and confirmations emphasizing the control of chemical substances, procedures for drainage disposal, and observation of these procedures, etc. to prevent any recurrence of the problem.

Environmental Education

We regularly conduct the environmental education of all employees by dividing them into various levels from new employees to managers. In addition, there are newsletters for employees explaining progress of the ISO14001 activities and terminology related to the environment. In the "Month of the Environment," we ensure that all employees are aware of the president's environmental policies by conveying his message, and we carry out other enlightenment activities for employees and workers of affiliated companies. We also emphasize the training of ISO14001 internal auditors.

"Education and training in specified works" such as painting and the handling of dangerous substances are strongly related to our business operations. We conduct the special education and training of employees engaged in such works so that they can learn about the effect that the works have on the environment and to enable them to acquire methods of daily control, monitoring and measurement and to deal with problems in an emergency.

Number of Registered ISO14001 Internal Auditors

As of April 1 each year

Number of Holders of Environment-Related Public Qualifications

As of January 1,2004

Qualification Type	Category/Class	Number of Holders
Environmental Measurement	(density, noise and vibration)	12
Energy Control	Thermal, Electric	113
Management in Preventing Pollution	Atmosphere Water Quality Class 1 to Class 4, Noise, Vibration	502
Chief Manager for Preventing Pollution		14
Supervisor for Handling Specified Chemical Substances		970
Supervisor for Operations Dealing with Organic Solvents		1,844
Engineering Management for Waste Disposal Facilities	(Waste Disposal Engineering Manager)	62
Management for Specially Designated Industrial Waste		148

Mid- and Long-Term Objectives and Progress in 2003

We have decided on five items for reducing the environmental burden, i.e., reduction of waste, restraint of chemical substances, energy saving, countermeasures against fluorocarbons and environmental management, and have set up “Mid- and Long-Term Objectives” to be achieved between Year 2005 and Year 2010 (see the attached table).

Category	Item	Medium- and Long-term Objective
① Waste reduction	Controlling generation and emission of waste materials	Limiting the total amount of waste materials in 2010 to 170,000 tons, a minimum 20% cut compared with the amount in 1992 by promoting resource savings and controlling material purchases
	Reducing waste landreclamation and landfill	Zero waste land-reclamation and landfill to be achieved by more than half of the Works by 2005, and by all the Works by 2010, through promotion of reuse and recycle
② Control of chemical substances	Total disuse of equipment using PCB	Disuse of ballasts for lighting fixture and high voltage equipment using PCB by 2010
	Reducing emission of organic chloride chemical substances	By thoroughly controlling organic chloride chemical substances and their emissions, atmosphere releases of dichloromethane, trichloroethylene, and tetrachloro-ethylene to be reduced by 95% by 2005, and by 100% by 2010, compared with 1996 levels
③ Energy conservation	Reducing CO_2 emission	Reduction of CO_2 emission by 6% by 2010, compared with the 1990 level, through strict control of CO_2 emission at production plants. Introduction of solar power generating systems by 2005
④ Countermeasures against fluorocarbons*	Reducing use of fluorocarbons	Switching from HCFC that can destroys the ozone layer to HFC whose ozone destruction factor is zero, by 2010
⑤ Environment oriented business management	Environmental management system	Continuation of renewal of ISO14001 certification for the Works in Japan
	Database system for environment-based corporate management	Developing a database system for the data of environmental burden by 2005
	Promoting environmental accounting	Continuous work on environmental accounting, and completing the on-line summary system by 2005
	Issuing Environmental Reports	Further upgrading of the contents for the following issues
	Purchase of environmentally friendly products	Encouraging the purchase of environmentally friendly goods based on the in-house guideline for purchasing "Green goods"
	Advancing environment-conforming designs	Setting up and promoting working groups for designs conforming to environmental requirements

*Fluorocarbons : Chlorofluorocarbons (CFCs), Hydrochlorofluorocarbons (HCFCs) and Hydrofluorocarbons (HFCs)

For Realization of a Sustainable Society

General Manager of General Affairs Department

Katsuhiko Yasuda

Among major shipbuilding and heavy machinery manufacturing companies in Japan, we first publicized in 2002 our mid- and long-term objectives for environmental protection to be achieved between 2005 and 2010, based on the basic policy and the conduct guidelines established in 1996. Our headquarters and works are playing a central role in promoting various activities to achieve the objectives.

The progress of these activities is monitored and evaluated by the regular Environment Committee, and mid- and long-term objectives are comprehensively reviewed.

We will exceed the waste materials reduction target, but to restrain the emission of

	Progress in 2003	Evaluation
	The total emission amount of waste materials is 144,000 tons, a reduction of 33.3% compared to the total emission amount in base year 1992 (216,000 tons)	Exceeded the target of 20% reduction
	Two works (Yokohama Dockyard & Machinery Works and Takasago Machinery Works) achieved zero emission. One headquarters and two divisions (General Machinery & Special Vehicle Headquarters, the Paper & Printing Machinery Division, and the Machine Tool Division) are working on zero emission. The "Company-wide Zero Emission Sub-committee" began and is supporting these zero emission activities.	Two works already achieved the target, and three other works are working to achieve the target. A total of five works will achieve the target by 2005.
	Promoting the plan for the complete disuse of equipment using PCBs by 2010	Progressing as planned
	The total emission amount of organic chloride chemical substances is 14.2 tons, A reduction of 94.6% compared to base year 1996 (262.2 tons)	Progressing close to plan
	The total amount of CO_2 emission is 492,000 tons, an increase of 4.2% compared to base year 1990 (472,000 tons).	In the first half-term, a 1.2% reduction was achieved, but situation worsened in the second half-term due to an increase in the use of energy. Strengthening energy-saving activities is necessary.
	Introduction of the20-kW solar photo voltaic power-generation system. The aggregate total amount is 390 kW.	Progressing as planned
	The Air-Conditioning & Refrigeration Systems Headquarters is promoting the reduction in HCFC emission. The Nagoya Guidance & Propulsion Systems Works is changing its cleaning method. The Paper & Printing Machinery Division, Nagasaki Shipyard & Machinery Works and Yokohama Dockyard & Machinery Works are promoting the replacement of equipment that uses HCFCs.	Progressing as planned. Change of cleaning method will be expedited.
	All domestic production sites (15 works, headquarters and divisions) have obtained ISO14001 certification, and are continuing procedures for renewal.	Progressing as planned. Acquisition of certification by affiliated companies will be expedited.
	Started preparation for the creation of database including aggregation of the PRTR system.	Proceeding further with the work
	Aggregation of environmental accounting results in April,made public in the 2003 Environmental Report.	Progressing as planned
	The 2003 edition (Japanese language version) was issued on June 26.	Issued as planned
	Green purchasing utilizing the Internet has been developed company-wide.	Progressing as planned
	Study on the mechanism and standards to continuously create environment-friendly products	More specific development based upon the standards will be promoted.

chemical substances and to save more energy (restraint of CO_2 emission), greater efforts are required to achieve the target. In particular, concerning restraint of CO_2 emission, our efforts should not be limited to controlling CO_2 emission entailed in our own business activities. For example, we have been conducting R&D for a system in which CO_2 is retained deep in the ground or under the sea after recovery. By utilizing our technology for environmental protection, we can contribute to reducing the environmental burden on society as a whole.

Sure and steady implementation to achieve the mid- and long-term objectives based upon the "Basic Policy on environmental Matters" and the development of company-wide activities to create environment-friendly products compose a core to improve the environmental management of the company. At the same time, it meets the requirements of society. To contribute to the prevention of global warming and the realization of a recycling-based society, we will positively promote our mid- and long-term activities to reduce the environmental burden and contribute to the realization of a sustainable society.

Environmental Accounting

In order to comprehend investment and expense for environmental protection and its results, we have established our own "Guidelines for Environmental Accounting," incorporating concrete examples with reference to the "Guide Book for Environmental Accounting (2002 edition)" of the Ministry of the Environment and have continued to quantitatively measure these matters since 2001.

In addition, we began this year a trial calculation of the economic effect on customers when they use our products.

Cost of Environmental Protection

Both amount of investment and expenses in 2003 increased compared to 2002. The total amount of investment was 3.7 billion yen, in which the amount of investment related to the production areas increased. The total expenses amounted to 14.5 billion yen, in which expenses for research and development (R&D) related to the environment increased, comprising 70% of the total amount.

Effect of Environmental Protection and Its Economic Effect

As a result of environmental protection activities such as recycling and energy saving, there was an economic effect of about 2.1 billion yen.

In addition, as shown in the table below, we generated various environmental protection effects as qualitative elements that are difficult to calculate in terms of money.

Environmental Accounting

(Unit: 100 million yen)

Category	Description	2001		2002		2003	
		Investments	Costs	Investments	Costs	Investments	Costs
Production Areas	Costs for pollution prevention, global environmental protection, resource recycling, etc.	17	38	23	36	26	34
Upstream/Downstream	Consignment fees for packaging and recycling of products, etc.	—	1	—	1	—	1
Management Activities	Operating costs of environmental management divisions, costs for configuration and maintenance of the environmental management system, etc.	—	11	—	9	—	10
R&D	Costs for research and development of environment-friendly products, etc.	8	70	11	66	10	95
Public & Social Activities	Costs for disclosing environment-related information and placing such ads, etc.	—	3	—	3	—	4
Environmental remediation	Dues and charges on pollution load, costs for underground water and soil purification, etc.	—	1	—	1	1	1
Total		25	124	34	116	37	145

The total amount of investment in plants and equipment in 2003 was 69.3 billion yen. Of this, investment in plants and equipment related to the environment was 3.7 billion yen (5.3%).

The total expenses for research and development in 2003 was 96 billion yen. Of this, research and development expenses related to the environment were 10.5 billion yen (10.9%).

Effect on Environmental Protection

Details of the Effect
•Prevention of Outflow of Oils/Fats and Chemical Substances
•Making our PCB Waste Harmless
•Reduction in Emission of Water/Air Pollutants
•Development of Various Types of Environment-Conscious Products

Economic Effect Resulting from Countermeasures for Environmental Protection

(Unit: 100 million yen)

Monetary Effect Item	2001	2002	2003
Income from recycling	4	6	9
Cost reduction due to energy saving	4	6	6
Waste treatment cost reduction due to recycling	1	2	2
Reductions in supply water purchase and waste water treatment cost	4	4	4
Total	13	18	21

Note: Items indicated in the table are limited to those that can be quantitatively measured in monetary value.
So-called "deemed effects" are not included in the calculation.

Economic Effect Gained by Customers

From 2003, we started to make trial calculations of the economic effect on customers when they use our products, based upon reduction in the CO_2 amount.

Reduced CO_2 Amount When Our Products Are Used (trial calculations for year 2003)

Product	CO_2 Reduction (1,000 tons)	Amount (million yen)	Basis of Calculation
Nuclear Power Plants	56,690.00	535,720	Trial calculations based on the actually generated output in 2003 from nuclear power plants built by MHI.*1,*2
Natural Energy Power Generation (wind power, solar photovoltaic power generation)	169.94	1,606	Trial calculations based on the actual delivery record in 2003 by MHI*1,*2
Gas Engine Co-generation Systems	141.60	1,338	Trial calculations based on the delivery record in 2003 of the gas engine "MACH-30G" and the Miller cycle gas engine "GSR series". *1,*3
High-Efficiency Centrifugal Liquid Chillers	24.98	236	Trial calculations based on the aggregated delivery record up to 2003 (compared to the conventional product)*1
Forklift trucks	8.34	79	Trial calculations based on the sales record of "GRENDIA" in 2003 (compared to the conventional product)*1

Notes: *1 For the calculation of the monetary amount, the proforma calculation value of 9,450 yen / t-CO_2 of the Ministry of the Environment was used.
*2 Comparison was made with the CO_2 emission amount of 0.379 kg-CO_2 /kWh for the amount of electricity used (the actual fiscal 2001 result reported by the Federation of Electric Power Companies of Japan).
*3 In addition to the above *2 , concerning calorific value, comparison was made with the grade A oil-burning boiler with an efficiency of 90%.

Overall Picture of the Effect on the Environment by Our Business Operations

In the process of production, we use various resources. Realizing that it is important to be aware of the effect on the environment in all our operations, we strive to identify the amount of resources used such as energy and water as well as the amount of resulting waste at our headquarters, works and divisions.

Furthermore, we will contribute to the preservation of the environment of society as a whole by decreasing the burden on the environment when our products are used.

Input and Output

Input

Total Energy Input
10,420,716,745 MJ

•Electricity	713,542MWh
•Grade A crude oil	25,941
•Grade C crude oil	8,451
•City gas	18,465
•Light oil	10,530
•Kerosene	8,748
•LPG	2,028t
•Other (Steam, jet fuel, butane, etc.)	455,882,003MJ

Water
12.28 million tons

Resources
Iron, plastics, paper and other

MHI Business Operations

Output

CO_2
492 thousand tons

NOx
SOx

Chemical substances
2,854 tons

Wastewater
10.21 million tons

Waste materials
144 thousand tons

Vibration
Noise
Odor

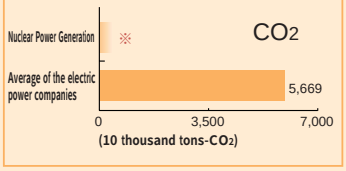
Products

Decreasing Effect on the Environmental Burden When Our Products Are Used (examples)

Nuclear Power Generation

Nuclear power is generated by nuclear fission and combustion is not required for the generation of power. Therefore, CO_2 is not emitted during the power generation process.※ Nuclear power generation significantly contributes to restraining CO_2 emission.

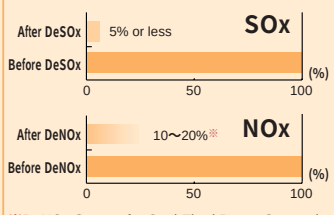
●Comparison between the CO_2 emission amount by nuclear power generation and the average CO_2 emission amount*1 by power generation of the Japanese electric power companies. (Trial calculations are made for the total electric energy of 149.58 million MWh generated in 2003 by nuclear power plants built by MHI)



Flue Gas Desulfurization (DeSOx) and Denitration (DeNOx) System

These systems restrain the emission of SOx and NOx, and are utilized in implementing countermeasures against acid rain.

●Comparisons of the concentration of SOx and NOx in the flue gas from thermal power generation

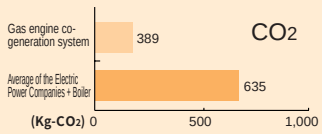


※DeNOx System for Coal-Fired Power Generation

Power Generation Gas Engine Co-generation System

This system contributes to energy conservation and restraint of CO_2 emission with the world's highest level total conversion efficiency.

●Comparison of the CO2 emission amount was made assuming the same amount of electric power and heat from the gas engine "MACH-30G" co-generation system is purchased from the general Japanese electric power companies*1 and obtained from a conventional heavy oil burning boiler.
(This is a trial calculation for power generation of 1 MWh with the gas engine)



*1 The CO_2 emission amount of 0.379 kg-CO_2/kWh for the amount of electricity used (the actual fiscal 2000 result reported by the Federation of Electric Power Companies of Japan) was used.

Countermeasures Against Global Warming

Concerning greenhouse gases that cause global warming, we make efforts to reduce CO_2 gas emission. At production sites, we are promoting improvement in the efficiency of heat utilization by introducing co-generation system and reducing the electricity used for production by introducing energy-saving equipment. In research and development, too, in addition to improving the energy-saving features of our products, we are striving to reduce the amount of CO_2 emission from our customers using our products by offering co-generation systems, CO_2-recovery technology, and so on.

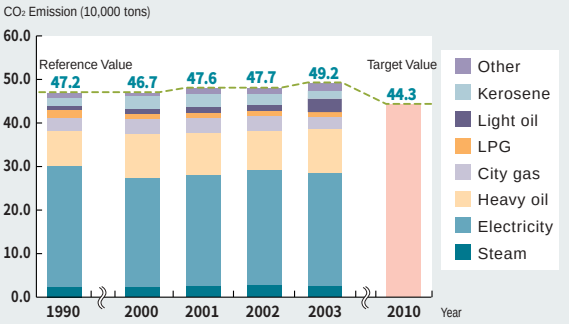
CO_2 Emission

In spite of promoting energy-saving activities in our respective works, the CO_2 emission in 2003 increased by 4.2% compared to base year 1990.

The primary reason for this increase is the increase of the use of fuel for trial runs and for other operations involved in the construction of large cruise ships (Diamond Princess and Sapphire Princess) in Nagasaki Shipyard & Machinery Works.

We will further continue our efforts to reduce emission to achieve the target set in 2010.

CO_2 Emission

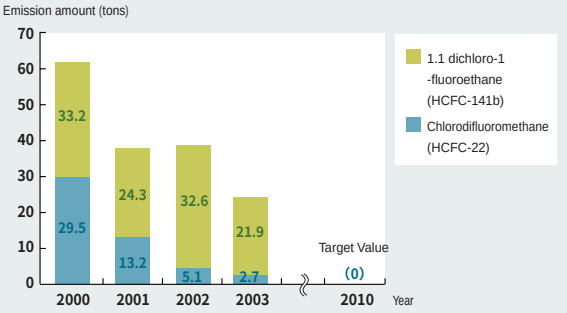


Greenhouse Gases

Chlorodifluoromethane (HCFC-22) and 1.1 dichloro-1-fluoroethane (HCFC-141b) are said to be greenhouse gases that cause global warming as well as substances that destroy the ozone layer. We use these substances for cleaning equipment. However, compared with 2002, we reduced the emission amount of HCFC-22 to 2.7 tons, a reduction of 2.4 tons, and reduced that of HCFC-141b to 21.9 tons, a reduction of 10.7 tons.

Towards the total abolition of the use of these substances by 2010 as established in our mid- and long-term objectives, we will further endeavor to reduce use by promoting replacement of these substances and by other means.

Transition of HCFC Emission Amount



Topic — Co-generation System in the Building of the Head Office

The cogeneration system has been introduced in the building of the MHI head office in Shinagawa, Tokyo. Two units of our aircraft engine conversion-type 2,600-kW gas turbine generators have been installed. Energy utilization efficiency of 75% has been attained with city gas as fuel by using electric power for lighting the building and by utilizing exhaust heat for air-conditioning.

Topic — Utilization of Solar Power Generation and Monitoring its Performance

In the head office building, a total of 426 sets (20 kW) of MHI's amorphous-type solar cell modules have been installed in the eaves of the entrance hall, on the roof of the adjoining "skyway" and on the wall facing the central garden.

Solar cell modules have been installed in the respective works, and the power generation performances are displayed on the monitor in the showroom on the 2nd floor of the head office building.

Comment of the Person in Charge

Electric Facilities Branch, Mechatronic Equipment Manufacturing Shop
Power Plant, Machinery & Electronic Equipment Manufacturing Department
Kobe Shipyard & Machinery Works
Fukashi Okawa

A 2.1% reduction in electricity use has been achieved through careful and detailed management.

In 2003, the Kobe Shipyard & Machinery Works emphasized energy conservation. First of all, electricity loss during distribution was reduced by adopting the high-efficiency transformer when renewing the electric power receiving and transformation facility. As a result, 390,000 kWh of electric power was saved in one year. Furthermore, we analyzed equipment operations and found that some items were useless. We changed the lighting of the office floor from three lights to two, stopped operation of the ventilation fan in the building at night, and effectively used the heat storage tank. As a result of these measures, we can save 1,020,000 kWh of electric power in one year.

In the compound of this works where we handle a wide range of products, it is not easy to perform detailed control and analysis. However, we will further make proposals for the effective use of energy leading to a reduction in cost and making our customers happy.

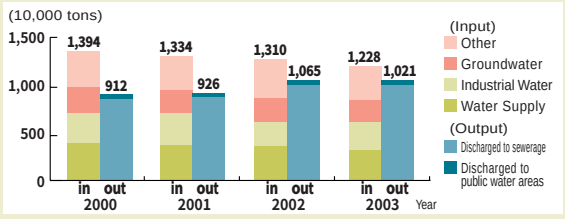
Resources Conservation and Waste Management

MHI is consistently working to reduce the amount of resources used, to reuse resources and to reduce waste materials. We are proceeding with effective utilization of water for restraining the use of groundwater, to prevent ground subsidence. We work almost only with recycled paper and also we try to use the reverse side of sheets as much as possible. In MHI, the ratio of recycling is increasing and the generation of waste materials is decreasing year by year. The Yokohama Dockyard & Machinery Works and Takasago Machinery Works, who have already achieved "zero emission (means zero waste landreclamation and landfill)," play a leading role in this field.

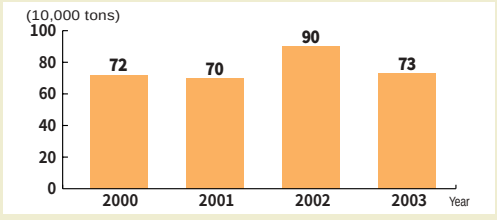
Resources

The amount of water used is gradually decreasing. We succeeded in reducing the amount of water used by about 6% in 2003 compared to the previous year. In addition, we reduced the amount of discharged water by about 4% compared to the previous year. The amount of recycled water used decreased because less recycled water was required for watering the trees due to the cool summer.

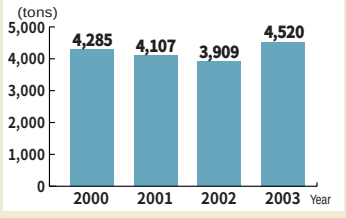
Transition of the Amount of Water Used and Water Discharged



Amount of Recycled Water



Amount of Paper Used

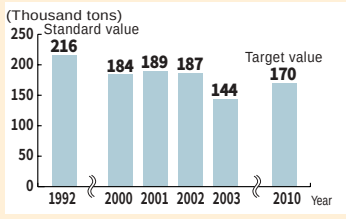


In 2003, the number of sheets of paper used did not change much, but the use of thick paper increased. As a result, the weight of paper used increased considerably. We will further strive to use the reverse side of sheets, use less paper, etc.

Waste Materials

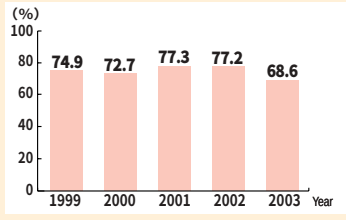
Since 2003, slag (waste sand of casting, etc.), which is reused as a recycling resource in the works, has not been regarded as a waste material. Therefore, the amount of waste material generated was considerably less in 2003 compared with previous year. Since slag had been a large portion in terms of weight, the ratio of the amount of each waste material has changed considerably.

Transition of the Amount of Waste Materials Generated



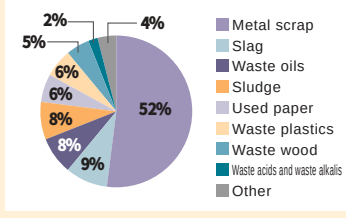
Reduced by 33% compared to 1992. The target for 2010 was achieved in advance.

Transition of the Recycling Ratio



The effect of "zero emission" activities is particularly remarkable in five works. Two of the works have already achieved "zero emission," and the three others are working toward it. However, since we determined that slag should be excluded from the category of waste materials, the recycling ratio in 2003 decreased considerably.

Generation Status of Waste Materials by Type



Metal scrap and slag whose treatment for reuse is assigned to a subcontractor outside the works were regarded as waste materials even in 2003. Among the various waste materials, they occupy the largest percentage even now, although the percentage is smaller than before (75% for metal scrap and slag combined).

Comment of the Person in Charge

Safety & Environment Management Section,
General Affairs Department
Takasago Machinery Works
Atsuro Yokota

We secured the cooperation of local enterprises and achieved "zero emission."

In the Takasago Machinery Works, in February 2002, we declared that we would strive to achieve the objective of "zero emission."

First of all, we visited enterprises or business establishments advanced in this activity. Then, we toured various candidates for assignment of our jobs nationwide and prepared a table comparing the latest recycling technologies and costs. I thought the order for this job should be placed with enterprises with which we already have business relations or with a local enterprise. We checked jointly with candidates for the job whether they could perform the same transactions as other advanced enterprises, based upon our survey results.

In conversation with a representative from a candidate enterprise, we came up with the idea of recovering metal from scavenged earth and sand in the plant, in which various raw materials are mixed by combining a disused rocking-type sieve with the magnetic selector.

We established various methods of recovering resources from waste materials by altering the method of disposal, and achieved a recycling ratio of 99% in March 2004. Through this achievement of zero emission, we believe we have strengthened our partnership with local enterprises.

Control of Chemical Substances

MHI strictly controls the use and storage of chemical substances required for production. In addition, through participating in the PRTP[*1] pilot project of the Environment Agency (previous name) and promoting the guidelines of the Keidanren (Japan Federation of Economic Organizations) Voluntary Action Plan on the Environment, we have been collecting and managing data of such chemical substances since 1997. Each of our plants and works manages its own MSDS[*2] (Material Safety Data Sheet) to ensure the safety of customers and employees. Concerning organic solvents and organic chlorine chemical substances, we are developing an alternative engineering method and alternative substances.

*1
PRTR Law: This mechanism detects, summarizes and publicizes the sources of innocuous chemical substances, the amount of such substances generated, the amount of such substances in waste and taken from plants and works, and other data. This method was established as a regulation in 1999. The manufacturer or user of the substances concerned must report to the administrative authority once a year.

*2
MSDS: Material safety data sheet of chemicals and other substances. This provides information on ingredients, characteristics, handling methods, etc., to ensure the adequate control of chemical substances and other products when they are shipped to other businesses.

*3
The unit of dioxins is mg-TEQ

PRTR: Emission and Transfer Amount of Environmental Pollutants

(unit: t)

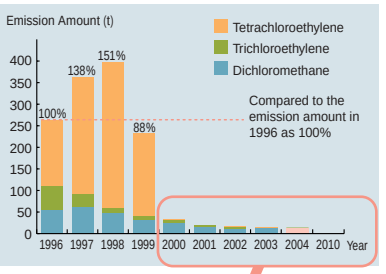
Substance No.	Name of Substance	2001		2002		2003	
		Emission Amount	Transfer Amount	Emission Amount	Transfer Amount	Emission Amount	Transfer Amount
30	Bisphenol A-Type Epoxy Resin	0.4	50.0	0.5	39.5	0.9	47.6
40	Ethylbenzene	268.0	16.4	290.5	16.9	307.0	31.5
43	Ethylene Glycol	0	1.4	0	1.0	0	1.3
63	Xylene	1296.6	93.2	1201.4	83.1	1365.1	94.5
68	Chromium and Chromium (III) Compounds	2.4	116.3	1.7	82.2	2.0	216.3
69 ★	Chromium (VI) Compounds	0	3.4	0	10.6	0.3	10.9
85	Chlorodifluoromethane (HCFC-22)	9.7	0	5.1	13.0	0.8	5.3
99	Vanadium Pentoxide	0	5.9	0	1.0	0	0
132	1.1 Dichloro-1-Fluoroethane (HCFC-141b)	24.3	1.6	32.6	1.4	15.0	0
145	Dichloromethane	14.0	0	8.8	8.1	9.9	0
177	Styrene	21.7	0	20.0	1.6	32.0	0
179 ★	Dioxins (*3)	121.5	1058.1	69.5	590.1	1.7	3.9
200	Tetrachloroehylene	0.5	9.5	1.1	6.0	0.6	9.4
211	Trichloroethylene	0.6	13.0	4.7	16.8	0.4	14.0
224	1.3.5-Trimethylbenzene	0.6	0	1.7	0	0	0
227	Toluene	535.9	34.2	465.1	33.6	543.9	46.5
231	Nickel	7.0	1.0	0	2.1	0	0.8
299 ★	Benzene	0	0	0	0	0	0
311	Manganese and its Compounds	0	18.9	0	5.5	0.2	20.4

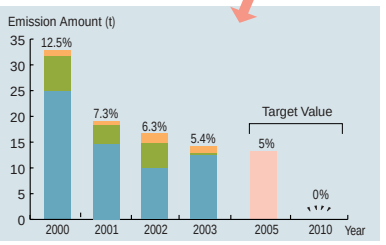
Note: For designated Class 1 specified chemical substances, a record is made for substances whose annual transaction amount is 0.5 tons or more.
For other Class 1 specified chemical substances, a record is made for substances whose annual transaction amount is 5 tons or more.

Organic Chlorine Substances

The emission amount of organic chlorine substances into the air in 2003 is 5.4% of that in 1996, which is very close to the reduction target. The main reason for the considerable decrease in the emission amount of trichloroethylene was the switchover to an alternative substance in April 2003 at the Nagoya Guidance & Propulsion Systems Works.

Emission Amount of Organic Chlorine Chemical Substances into the Air





Topic Completion of Switchover to Alternative HFCs

For the use of fluorocarbons as refrigerants, we proceeded with the switchover from HCFCs that destroy the ozone layer to HFCs that do not. In September 2003, we completed the switchover to HFCs for refrigerants used in all room air-conditioners for sale in Japan.

The achievement ratio of the energy conservation standard is 121%. Residential Use Split Air-Conditioner SRK28SF that uses HFCs as refrigerants.

Comment of the Person in Charge

Chief of Process Shop, Production Department
Nagoya Guidance & Propulsion Systems Works
Toshiyuki Ito

**We have implemented efforts to reduce trichloroethylene and find a suitable replacement.
We are moving forward step by step from what we can do now to protect the global environment.**

In the Nagoya Guidance & Propulsion Systems Works, trichloroethylene was used for a long time for cleaning parts prior to galvanization. However, the enforcement of the 1999 PRTR law required us to urgently tackle the issue of reducing the amount of trichloroethylene we use and change to an alternative substance. This is because trichloroethylene, which is an organic chlorine substance, was designated as a class 1 chemical substance because of its affect on work safety, and causing photochemical smog and generating particulate matter.

Even before the enforcement of the PRTR law, our works had already started to reduce the use of trichloroethylene in 1998. We reduced the usage by about 50% in 2002 compared to the amount in 1998, by taking measures such as preventing evaporation and limiting the time of use. To reduce the use further, we have conducted various researches on water cleaning agents and oil-cleaning agents to find an alternative substances. We had a difficulty in finding a cleaning agent that satisfies the requirements for quality of aerospace equipment. As a result of repeated tests on actual parts, we confirmed that the organic bromine detergent, Dipsol, is safe and effective and is excellent in degreasing and cleaning. We switched over to this detergent in 2003. This detergent is used in galvanization shop and other areas in our works as an environment-friendly alternative to trichloroethylene.

By making good use of this experience, we will continue activities to protect the environment.

Environmental Risk Management

To protect the global environment, in addition to observing various laws and regulations concerning the environment, it is necessary to accurately grasp risk in business activities such as contamination accidents that negatively affect the environment and to establish procedures to prevent such occurrences. At the same time, a prompt, precise response is important in emergencies. For this purpose, every works of our company prepares control systems to grasp the latent risks and holds regular training sessions and drills to improve the response in emergency situations.

Risk Control Systems

Every works of our company prepares a manual that stipulates methods of detecting risks that require control, methods of the daily control of such risks, measures to be taken to reduce risk if it occurs, methods of transferring information concerning risk to the parties concerned, training for reaction in emergencies, etc., and risk control.

In addition, we have established a mechanism in which information on an emergency is promptly conveyed to the president when it occurs through the risk control information systems of the company.

Training in Preparing for an Emergency

Half of our domestic works face the sea. The sea will be instantly polluted if an oil leak occurs during operations at these locations.

To prepare for such an emergency, all of the works regularly repeat emergency drills. For example, they practice drills for quick recovery with oil fences to minimize oil spread or train in taking effective countermeasures should chemical substances leak.

Measures Taken to Clean the Soil and Groundwater of Biwajima by the Air-Conditioning & Refrigeration Systems Headquarters

As a result of a survey of deep soil by boring and a survey of groundwater in the Biwajima Plant of our Air-Conditioning & Refrigeration Systems Headquarters in Aichi Prefecture that we conducted voluntarily from September 2003 to January 2004, tetrachloroethylene, trichloroethylene, dichloromethane, cis-1,2-dichloroethylene, and 1,1-dichloroethylene in amounts that exceed the standard emission value and the standard environmental value of groundwater were detected.

This plant terminated the use of these chemical substances in 1999, but before this, organic chlorine chemical substances used during cleaning seem to have leaked from the facilities through cracks in the concrete, etc, into the soil. This situation is considered to be a cause of soil and water contamination.

In this plant, barrier wells are now installed to prevent the flow of water outside the plant compound, and pumped up groundwater is discharged outside after separating the chemical substances. In addition, volatilized chemical substances are absorbed by activated carbon.

The purification plant which started operation

From now on, we will regularly conduct monitoring surveys of the groundwater, and the results will be reported to the administrative authority.

[Survey results and other details are reported in our homepage.]
→ http://www.mhi.co.jp/dojyo_cyosa/main.html
(Only in Japanese Language)

Response to Complaints from Neighboring Residents

In August 2003, a reader of the "2003 Environmental Report" of MHI made a request as a reply to the questionnaire. He pointed out that in the Haneda Factory of MHI East Japan Sales Co., an affiliated company of MHI, vehicles repeatedly park unlawfully on the road with engines idling and oil flow from the factory soiling the walkway. He requested that we take proper countermeasures.

On receiving this request, our staff concerned promptly visited the factory. We gathered employees of the factory and made them aware of the facts pointed out by the reader. We let them clean the walkway, and we replaced the pavement. Moreover, we prohibited parking on the road and took measures to prevent a re-occurrence of oil flow.

Walkway soiled with oil

After replacement of the pavement

Green Purchasing

To contribute to the construction of a recycling-oriented society, it necessary to increase the ratio of use of environmentally friendly equipment and materials in our production activities by replacing the conventional equipment and materials with those having little burden on the environment. At present, our efforts are limited mostly to office supplies but we will gradually extend the coverage of green purchasing to production materials.

Green Purchasing

We established the "Basic Policy on Green Purchasing" on March 29, 2002, and are promoting green purchasing company-wide.

Green purchasing items are those indirectly involved in production such as office supplies, electrical appliances, expendable supplies in the factory and automobiles (we call them "indirect materials"). We select these goods not only from the viewpoint of their environmental burden, but also from the viewpoint of life cycle assessment considering packaging materials, consumables involved in using these goods, and time of disposal.

Furthermore, in addition to restraining purchasing, we are striving to reduce the frequency of the delivery of goods by implementing planned purchasing.

Introduction of the J-Point System

We have introduced the J-Point System of Intranet to purchase indirect materials such as office supplies and factory consumables (MHI Indirect Materials Intensive Purchasing System). With this system, we can encourage the preferential purchase of environmentally friendly goods and simultaneously identify the results of green purchasing in units of individuals, sections and departments, and works.

Working Clothes Made of Plastic Bottle Fibers

In February 2004, we decided to adopt working clothes made of recycled plastic bottle fibers, and the wearing of such working clothes is being gradually implemented in our respective works and research & development centers.

Fibers of about eight 1.5 liter plastic bottles are reused to make one suit of working clothes. About 30,000 suits of working clothes will be supplied every year in the whole company for new employees and to replace the clothes now being worn. This means the reuse of about 250,000 plastic bottles per year.

The materials of the working clothes are composed of 55% recycled polyester, 35% cotton and 10% new polyester.

"Ecomark" shows that 50% or more of the material used is recycled fibers.

Green Electric Power

We support the "Green Power Certification System"* of Japan Natural Energy Co., Ltd. based upon wind power generation, and concluded a 15-year agreement with this company in April 2002 for the purchase of 1 million kWh/year of green electric power. Clean green power purchased has been utilized in the building of the Mitsubishi Head Office and the Minatomirai Industrial Museum.

*** "Green Power Certification System"**

Green power is electric power generated without emitting a large amount of CO_2 and without destroying the surrounding environment. Green power is handled at the price where the added value due to reduction in fossil fuels, reduction in CO_2 emission, etc. is included. A certificate is issued to green power purchasers showing the amount of green power used in their operations; this encourages enterprises and local self-governing bodies to take further voluntary measures for environmental preservation.

Green power certificate

Concerning the environmental activities of respective headquarters, divisions and works, please see our website that offers various on-the-spot reports. **(in Japanese Language)**
MHI Homepage (http://www.mhi.co.jp)

"Nothing Is Impossible!"

– A Bold Try for Zero Emission by the Yokohama Dockyard & Machinery Works –

The Yokohama Dockyard & Machinery Works, engaged in the manufacture of environmental equipment such as refuse incinerators, power systems and bridges, as well as the repair of ships, started activities for "zero emission" (zero waste land-reclamation and landfill) in March 1999, and achieved zero emission in March 2001, a half year earlier than planned.

In the Yokohama Dockyard & Machinery Works, waste generated from ship repair amounts to one-third of the total waste of the works. How has zero emission been accomplished with various kinds of waste such as garbage from the daily life of seamen, shells scraped off the hulls of ships, and waste interior decoration materials in which a number of raw materials are mixed? The key lies in the strict separation of waste by people concerned and the use of two treatment devices made by the works themselves.

We are Responsible for the Disposal of Mixed Waste and for Raising the Awareness of a Large Staff Regarding Separation Methods.

Takahiro Inotsubo, Manager of Safety and Environment Section, General Affairs Department

"We used to think that this was impossible," confided Takahiro Inotsubo, Manager of the General Affairs Department. Before starting this activity, he visited an office equipment manufacturer that was noted for its advancement in this activity. However, compared to the clean office equipment-manufacturing factory where the waste substances are not diverse, the situation of the Yokohama Works, which must dispose of refuse from ships thick and sticky with rust, substances attached to the ships, and the daily garbage produced by seamen of the repair ships, seemed very different, and he initially concluded that zero emission could not be achieved. However, considering that it is unacceptable for a works that manufactures environmental equipment not to work towards zero emission, and that some ideas for new products might be created while working toward this objective, he determined to take up the task.

At that time, the breakdown of waste of the Yokohama Works was about 50% metal, about 15% sludge (sludge from the docks where ships are moored for repair and sludge from the drain water disposal facility in the works) and waste such as waste plastics, and about 35% wood chip. Since the recycling of metal (mostly steel plate) and sludge were already in progress, the tasks left were the separation of various waste products from ships and others and ensuring that the large numbers of workers including those working for subcontractors were thoroughly familiar with the waste separation methods.

Ship repair is one of the activities of the Yokohama Works.

Utilization of Devices Manufactured by the Works Themselves for Separation and Recycling

The self-made environmental devices contributed greatly to improving the recycling ratio. The carbonization furnace in which sludge is burned with steam until it is carbonized into charcoal is one such device. Previously, sludge was disposed of by incineration, but now, all sludge can be recycled due to the introduction of the carbonization furnace. In addition, the crushing and separation machine combined with the self-made device (installed in the recycle center) contributed to the recycling of various kinds of garbage from ships. The machine separates garbage in which various substances such as plastics and metal are mixed into respective raw materials using magnetic force.

In the carbonization furnace contributing to the improvement of the recycling ratio, No dioxin is generated during the operation of this furnace.

To control the emission amount of the respective places of duty, a bar code that identifies the original place of emission is put on the waste bag.

On the other hand, regarding the enforcement of strict separation, there were 20 different-colored waste containers, and the method of separation was explained in detail on workers' notice boards. In addition, for the proper guidance of workers, when and from where waste was emitted was checked by reading the bar code on the waste bag.

As a result of these activities, the Yokohama Dockyard & Machinery Works succeeded in achieving zero emission. This activity for zero emission will spread to all other works in Japan. Mr. Inotsubo expressed his hopes by saying, "We now believe that nothing is impossible; from now on, we will seek further solutions that meet the circumstances of our business operations and actual job sites."

Containers for separation of waste are clearly classified by color. Waste whose classification is difficult and new kinds of waste are put into the "Help Box."

A pocket-sized card showing separation containers and the separation method were distributed to all workers.

I Looked for Recycling Traders by Showing Collections of Photographs

Chief of Recycle Center
Mitsuo Takahashi

I was a member of the secretariat of zero emission promotion and was in charge of the selection of recycling traders and implementation of the thorough separation of waste in the works. First, I checked what waste is emitted from the works and analyzed the waste emitted. The waste was classified into about 80 categories. I took a series of photographs of the waste, and made an album of the photographs. To find methods of recycling waste, I visited various traders and showed them the album.

When zero emission was achieved, I felt tense rather than happy or satisfied, because I thought it would be more difficult to maintain zero emission than to achieve it. After continuing zero emission for a year and half, I now feel relieved. I will brace myself to continue this important task

Commitment to Our Customers

Implementing CS Activity to Build a Customer-Oriented Corporate Culture

Pursuing our creed that "We strongly believe that the customer comes first and that we are obligated to be an innovative partner to society," we are pressing ahead with our CS (Customer Satisfaction) activities at every level. Specifically, we try to get a good grasp of what our customers really want and respond by offering products and services that exceed those of other corporations. This way, we seek to gain a dominant market position and achieve sales and profit growth.

Recognizing that the company may have been deficient in listening to its customers' voices, we decided that the primary challenges to ensure our survival in the 21st century is "to provide products and services that reward the confidence that customers have in us," and "to develop a customer-oriented corporate culture."

Services that Support the Safety and Reliability of Nuclear Power

Nuclear power plants have a history of carrying out thoroughgoing maintenance programs that prioritize safety. Preventive maintenance designed to eliminate problems before they happen and retain the integrity and dependability of plant facilities has supported the good track record of safety and reliability of Japan's nuclear power plants.

The recent power market liberalization is imposing a demand for further improvement in the economy of power generation.

To fulfill the both the need to improve safety/reliability and to improve economy at the same time, we need ever more sophisticated, comprehensive engineering capability as well as the ability to provide highly reliable equipment and facilities.

Evaluating the Integrity of Equipment and Facilities, and Drawing Up Maintenance Programs

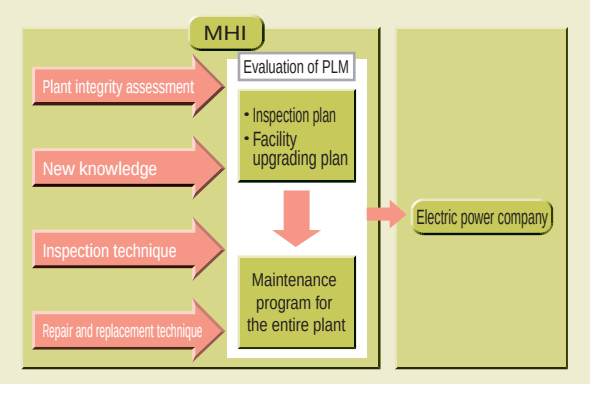
Nuclear power plants are obliged to evaluate all major plant equipment for integrity against aging-associated degradation before the 30 years-in-service period is complete and to present a report disclosing the results. This is called PLM (Plant Life Management) activity.

MHI, on the strength of a database of past plant surveys, knowledge gained from independent research, and expertise gained as a primary plant contractor, can assist nuclear plants in not only evaluating the integrity of their current equipment but also in forecasting aging-related events that may occur in their equipment. Because there are many items of equipment to be evaluated, and responsibility for them is divided among a number of design departments in our organization, an over-arching supervising unit is formed that takes charge of plant equipment evaluation projects across multiple design functions to provide customers with overall assistance.

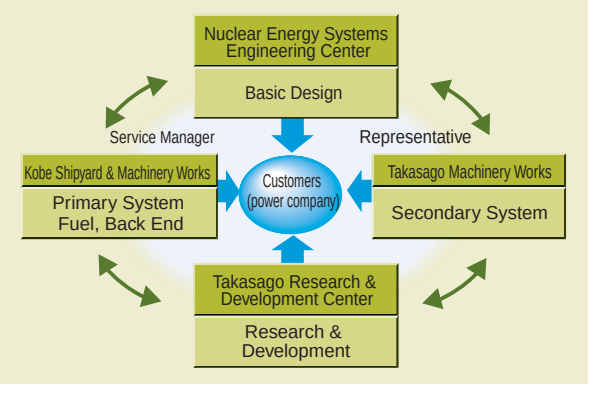
Staying in Closer Touch with Customers to Offer Speedier Service

It is important that we establish a plant-maintenance program and associated research work in a timely manner, which responds to customers' ideas and preferences. To this end, we devised a service system that keeps close contact with customers through the service managers assigned to a specific plant. The service manager is trained to look at things from the customer's point of view and promptly provide the necessary information. Another provision for sophisticated service is an organizational setup that acts across a number of the machinery works to ensure a smooth, quick response to customers' needs.

Support System for PLM Activity



Our customer-support organization



Setting Up CS Centers in the Machine Tool Division

MHI handles a wide variety of products ranging from power plants and machine tools to mass production machines such as air-conditioners. Customer services including complaint handling and user database management are handled by the individual organizational units that are divided product-by-product.

As an example, our Machine Tool Division (whose sales performance is directly affected by the judgments customers pass on its products) formed the CS Center Managing Group that reports directly to the division manager, considering that improvement in customer satisfaction is of central importance. The group strives to improve customer service through an across-department approach where it consolidates CS Centers (that contact customers firsthand) and goes as far as guiding or directing other groups such as Machining and Technology.

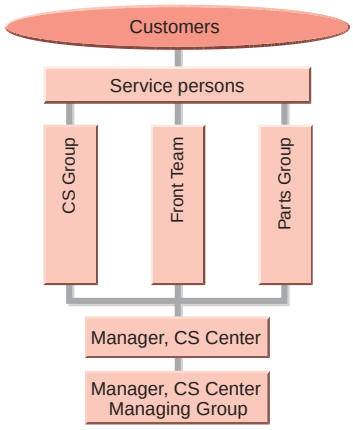
The CS Center is composed of three units: the CS group, the Front Team, and the Parts Group.

The CS Group attains greater use of IT for service activity, training service people, and for technical studies on service-related issues. It works with the Front Team and Parts Group "to push for an improved service system."

The Front Team is the customer's primary contact. Through communication with customers, it conducts activities to "respond quickly to service requirements to ensure the uninterrupted operation of the customer's machine."

The Parts Group is responsible for the supply and management of service parts in general. It pursues service operation geared to "deliver parts to the customer without delay."

Framework of CS Center



In Public Works, Local Residents Are Our Customers, and We Must Keep Them Informed

Today, in public works projects including the construction of roads and bridges, there is a need for a greater degree of information disclosure that allows affected local communities to have a better understanding of a project's benefits.

When awarded a contract for public works, we not only consider that the owner or the local government is our customer, but also that the local residents are our customers.

We believe that, as a contractor, we must make vigorous efforts to share information with local residents, in addition to successfully completing the work.

We furnish the owner with technical information in the form of a proposal for a process that shortens the construction period and keeps economic losses to a minimum or for a new working technique that clears traffic congestion at a job site.

The methods we use for offering information to local residents include tours to the work site, study classes for elementary school children, and advanced sessions for high-school students. At the same time, we direct our efforts to public relations (PR) using locally popular media such as cable TV networks.

A CS Forum Held to Hear about Success Stories Chosen from 3,000 Entries

In our company, a grass-roots approach is used to tackle CS activities. Teams are formed on a by-product or by-organizational unit basis. There are 3,000 teams, and roughly 4,000 subjects are tackled. A forum is held once a year where selected teams present their experiences or benefits of the achievements they have made.

The 2nd such gathering, held in December, 2003, was attended by 350 company staff members including President Tsukuda and other executives. They listened to 17 teams presenting their CS-related efforts. A vigorous Q&A session followed.

Commitment to Our Employees

Helping Individual Staff Members Improve Themselves and Letting Them Feel Fulfilled

MHI thinks that there are essential conditions to its continued growth and prosperity. That is, we must: 1) encourage individual staff members to improve their own performance and 2) combine their forces and make them work synergistically to create company-wide competency. The role of our personnel department is to "help individual staff members improve themselves and make them feel fulfilled."

Specifically, we made far-going changes to our employee training system to promote a human resources development policy that assists each employee to improve their own performance and move toward self-realization. At the same time, we are in the process of: 1) reforming wage/personnel treatment system with more emphasis on performance, 2) introducing by-department recruiting practices, and 3) developing methods to make fuller use of female employees. All these add up to the creation of a corporate culture that gives greater respect to individuals, helps them develop their potential and allows them to make the most of their capabilities.

Pursuing Both Better Working Conditions and Company Growth

The labor-management relationship of our company is based on the spirit that both parties are committed to mutual understanding as stipulated in the governing agreement, and we concurrently pursue better working conditions and company development by solving all labor-management issues peacefully.

Various types of operational conference take place to discuss employer-employee issues at both company level and operation center level. The introduction of any new system that affects workers or alterations thereto is put into practice by the consent of both the workers and the management.

In-house Recruiting System to Reinvigorate Employees

An in-house recruiting system has been run since 1992 with the goal of: 1) considering employees' initiative or interest and 2) offering employees a chance to find a position within the company where they can play a more active part and work with pride and self-confidence.

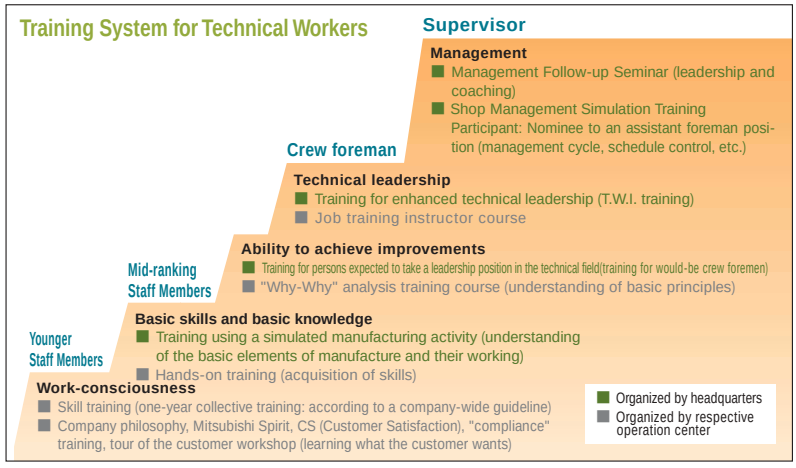
Applications are taken on a quarterly basis. Major offerings include entry into business sectors that are new to or hitherto not experienced by would-be recruitees, participation in national projects, and personnel reinforcement to segments expected to expand. Information on applicants is handled in strict confidence.

Developing Human Resources with An Eye toward the Future

A key issue in promoting business operations is whether we can equip ourselves with a good supply of personnel who have insight and can look at things from a wide perspective. Therefore, we subject our employees, from the day they join us, to various training programs. These programs are: 1) based on OJT (On-the-Job Training), 2) multi-layered and divided among job titles, and 3) organized to develop resources with an eye toward the future.

With the rapid progress of globalization, the way we do business is diversifying from, for example, the simple export of products to the implementation of internationally coordinated projects and overseas production schemes. To secure staff members who can respond to this trend, we have training programs containing, among other things, in-house foreign language-teaching courses and overseas study.

In addition, to ensure that shop floor techniques and skills (which are the basis of manufacturing operations) are passed from one generation of workers to the next, we systematically run a detailed training program targeting technical workers.



Working toward Improved Worker Health and Safety, Based on the Spirit of "Holding Life Sacred"

At MHI, the management and employees make unified efforts according to the "basic guidelines of employee health and safety policy," which are based on the three following principles: 1) "Consistently devote yourself to the spirit of "holding life sacred" and execute "safety first" practices as deemed necessary in your place or circumstances;" 2) "Contribute to the development of the community by turning out good products while making an all-out effort to ensure safety;" and 3) "Be aware that health is the basis of everything, and make continued efforts and act creatively to build a sound body and create a comfortable workplace."

Moving Toward a Reduction in On-the-Job Accidents and Injuries

We introduced an occupational health and safety management system throughout the company, under which individual operation centers carry out activities to sort out the causes of work-site accidents or injuries and to implement corrective action. Efforts are being made to cut back on the incidence of accident and injury by encouraging individual staff members to: 1) systematically promote health and safety management as seen fit in his or her position or circumstances, 2) take appropriate corrective measures and evaluate their results, and 3) eliminate accident factors. We also replace or refurbish aging manufacturing facilities so that the occurrence of major accidents is precluded.

Employee Health Management Program

MHI vigorously aids its employees in maintaining their mental and physical health. Health management systems have been formed in respective operation centers. Here, medical examinations and other tests for employees using five company-run hospitals and health guidance courses, both physical and mental, based on the results of the health checkups, are provided to ensure that employees stay in shape. It also handles various programs and events to promote the good health of employees and educate them in avoiding sickness and injury.

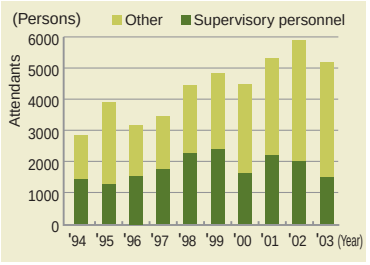
In addition, we drew up "Guidelines for a Comfortable Workplace" to improve the workplace environment, and are endeavoring to maintain and improve our working environment/working methods as well as our support systems (locker rooms, washrooms, etc.)

Incidence of On-the-job Injuries and Deaths

(Year)	'00	'01	'02	'03
Deaths	3	4	0	0
Injuries	89	79	84	94

The figures represent the total number of injuries and deaths under the categories of "MHI, MHI subsidiaries and subcontractor employees on MHI premises or on site" and "MHI temporary transferees."

Attendants to Mental Health Guidance Courses



Protecting Employees' Human Rights by Setting Up Various In-house Committees

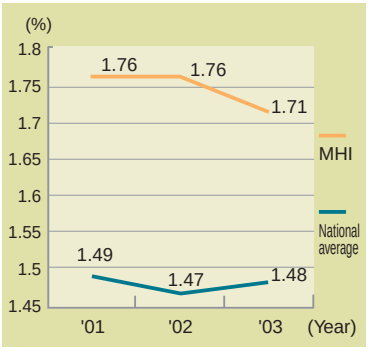
Addressing the Diversity Issue

MHI launched the Committee for the Promotion of Employment of Disabled People in June 1992 to expand job opportunities for disabled people. The committee's assignments include developing basic policies for the employment of disabled people, drawing-up and implementing related plans, raising awareness of disabled people, collecting and distributing relevant documents, and communicating and coordinating with governmental agencies and other institutions.

MHI has 618 disabled persons on its payroll as of June 1, 2003, who work in its operation centers and regional offices across the country.

Amid increased effort to move toward a gender-equal society, offering female employees chances to play a more active role in business operation has become a major challenge. We modified the related system last year to substantially extend the period that child-rearing female employees are allowed to have special working patterns, so that there is compatibility between being a worker and being a mother. Female employees are also offered training courses designed to assist in career building. Our efforts continue to enable them to develop their potential.

Employment of disabled people



Addressing Human Rights Problems

Conforming to the spirit of respect for human rights, we have a Committee for Raising Awareness of Human Rights in place to ensure a proper understanding of this value and help solve associated problems. This committee promotes human rights awareness, develops basic policies for related training courses, draws up and implements training plans, coaches in-house training instructors, and communicates and coordinates with governmental agencies and other institutions.

In the 13th meeting of the Committee held in February 2004, the representatives from the respective operation centers reported the progress of relevant training programs, and there were discussions on how to proceed with the programs and the prevention of sexual harassment.

Commitment to Local Communities

"MHI, a Premier Global Organization" in Touch with Local Communities

Contribution to society through business activities

Our basic philosophy is shown in our creed - "We strongly believe that the customer comes first and that we are obligated to be an innovative partner to society." We will continue contributing to society as a global corporation through the delivery of safe, excellent products and services brought by our technology and human resources.

Emphasizing a Trust-based Relationship with Local Communities

Our respective regional offices and works have continuously implemented philanthropic activities compatible with the characteristics of the community, of which they are a member. It is our belief that strengthening the relationship with local communities puts us on a sounder basis. We will continue to conduct activities that contribute to communities and nurture their trust in us.

Our Spending on Philanthropic Activities

MHI endorses the purpose of the "1% (One-percent) Club," conducted by Keidanren (Japan Federation of Economic Organization) As a member of the club since its foundation, we report our philanthropic expenditure every year.

By-field Expenditure

(In million yen)

Year	2000	2001	2002
Academic research	638	293	278
Education	236	199	476
Local Community	152	131	133
Sports	103	108	123
Other	362	330	244
Total	1,491	1,061	1,254
Ratio to our operating profit	3.21%	1.78%	1.92%

Note): • The figures include, in addition to cash donations, payment in kind, activities by employees, free use of our facilities, etc., which are translated into an amount of money. However, they do not include the private activities of employees.
• 2003 figures being summarized

Philanthropic Activities Conducted by MHI Across the Country

Receiving students on school excursions for a plant tour (Nagasaki Shipyard & Machinery Works)

The Nagasaki Shipyard & Machinery Works has a number of legacies on its premises that supported the modernization of Japan's industry, including the berth in which the battleship, Musashi, was once built and the oldest machine tools designated as important cultural properties of the nation. These are open to the public, and students often visit on school excursions.

Shinsen (Kobe Shipyard & Machinery Works) Summer School

The Kobe Shipyard & Machinery Works invites upper-grade primary school children and their parents during the summary holidays every year for an event featuring a plant tour and a hands-on scientific experiment show. It also sponsors a visit to the Kobe Science Museum where a mobile entertainment robot (named New Robot, "Shin-chan"), manufactured by the shipyard, is on display.

Launching ceremonies open to public (Nagasaki, Kobe and Shimonoseki Shipyard & Machinery Works)

MHI's three shipyards open the launching ceremonies of vessels they have completed to the local residents and the public. Celebrating the birth of a new vessel with residents is truly an enjoyable experience for the shipyard personnel.

Donating killifish (Hiroshima Machinery Works)

Killifish, which have become rare, now thrive in the drainage ditch on the premises of the Hiroshima Machinery Works. Every year, we donate the small fish to nearby kindergartens and elementary schools as teaching material to breed and observe.

Takasago Pictures Competition (Takasago Machinery Works)

The Takasago Machinery Works holds a picture competition every August, asking for entries from pupils attending elementary schools in Takasago City. Last year's competition, the 11th, was held with the theme "Future Town - I Wish I Could Live in A Town Like This" and received 4,443 entries from young artists. The pictures were exhibited in local shopping centers and other places.

Cleaning areas around factories (across Japan)

Employees of factories across the country volunteer to do cleaning activities, such as picking up litter in the area. Each employee, as a member of the local community, does his or her part to preserve the environment in the neighborhood.

Matching gift (Head Office)

The company donated the same amount of money that the Head Office employees raised for charity, and donated spoons and forks made of shape-memory alloy incorporating MHI's technology to 29 welfare facilities in the Kanto district.

Charity musical (Head Office)

Member companies of the Mitsubishi Group volunteer in working together to put on a charity musical every year. In 2003 (the 8th year of this attempt), 10 member companies including MHI sponsored and invited approximately 500 people who are disabled and children from nursing institutions to the musical, "Tengu no Kakurezato."

Philanthropic Activities in Foreign Countries

Supporting Disaster Relief Activities in Quake-stricken Southeast Iran

We have traditionally taken part in relief efforts in stricken areas around the world. In the case of the earthquake that devastated Iran's southeast district in December 2003, we donated 81 of our compact generators to the Iranian Red Cross.

Donating Teaching Materials to the Science & Technology Center in Saudi Arabia

We and three associated companies donated to the Science & Technology Center, Jubeil, Eastern Saudi Arabia, a parcel of teaching materials for children dealing with heat science.

Cooperation with the Keidanren (Japan Business Federation) Nature Conservation Fund

This fund is set up primarily to aid developing countries in the Asia-Pacific Region to preserve their natural environment. MHI cooperates in this fund every year from a philanthropic standpoint.

Mitsubishi Minatomirai Industrial Museum

～We want you to a have hands-on experience with the fun that science and technology have to offer～

Mitsubishi Minatomirai Industrial Museum was founded in June 1994 with the hope of becoming a place where young people who are to shoulder the future can entertain dreams through experiencing science & technology firsthand. The museum is divided into six display zones: "Environment," "Space," "Ocean," "Construction," "Energy," and "Technologies All Around Us." Exhibits are in the form of the real thing or models, panels, video images, attractions, and so on. All of these comprehensively explain various products and technologies that support our everyday life. They present, in an easy-to-understand manner, those state-of-the-art technologies that people usually have the least chance to get in touch with, so that people can have a better understanding of the relationship between technology and society and life.

A Museum Where You Can Learn with Enjoyment

This museum features many elaborate hands-on exhibits. For example, you can have hands-on experience with helicopter piloting or with design operation for a ship or airplane.

In addition to the permanent exhibits, we present a special exhibition from time to time, with a variety of events for school children. These include handicraft or experiment classes, quiz rallies, movies, lectures, and composition/pictures contests. Now that the school curriculum allocates less time to handicraft and scientific experiment in the classroom, we hope that more school children will visit and have the joy of knowing the basic rules behind various phenomena and the joy of producing things with their own hands.

We Have a Message to Children Who Are to Shoulder the Future

We will be pleased if a visit to this museum gives children the opportunity to take a fresh look at their current lifestyle. Problems run deep, especially regarding energy and the environment. We operate this facility in the hope that children understand what will happen if something is done or is not done, become aware of the root of problem and the principles they can apply to solve it.

We hope that children who are to shoulder the future acquire, in this place, a wide variety of knowledge. And it will be a great pleasure if a visit becomes an occasion that turns some of them into future scientists.

Museum Director,
Mitsubishi Minatomirai Industrial Museum
Reiko Sato

I really feel that the more you know about science and technology, the more fun you have. I study every day and tackle my job in the hope of conveying the advantages of science and technology to children.

Mitsubishi Minatomirai Industrial Museum

Mitsubishi Juko Yokohama Bldg., 3-1,
Minatomirai 3-chome, Nishi-ku, Yokohama, Japan
Postal Code: 220-8401
Phone: 81-45-224-9031
http://www.mhi.co.jp/museum/

Open: 10:00am-5:30pm (No admittance after 4:30PM)
Closed: Monday (Tuesday if Monday falls on a holiday), the end of the year and new-year holidays, special days of closure
Admission fee: ¥300 for adults / ¥200 for junior high-school and high-school students / ¥100 for schoolchildren
Free for schoolchildren / junior high-school-high-school students who visit for extramural activities (reservation needed)

Commitment to Our Shareholders, Suppliers, and Institutions

Relationship with Our Shareholders through Effective Disclosure

MHI places great value on building trust with its shareholders. Thus, we strive not only to stabilize and improve our financial performance but also to render our disclosure more effective.

To be more specific, we have renewed our Web IR site to provide shareholders with a higher degree of convenience and have also set up a new website entitled "To Individual Investors" to facilitate investing individual's understanding about us.

In addition, from June 2004, we will distribute a magazine entitled "To Our Shareholders," an enriched version of the former "Operation Report" provided to our shareholders.

Furthermore, to cater to the needs of foreign investors, our website carries financial statements, exhibits used in financial briefings, and other materials translated into English.

Dividends (for the last four years)

Accounting Period	Dividends per share
Profit Dividends FY 2000	4 yen
Interim Dividends FY 2001	2 yen
Profit Dividends FY 2001	2 yen
Interim Dividends FY 2002	3 yen
Profit Dividends FY 2002	3 yen
Interim Dividends FY 2003	3 yen
Profit Dividends FY 2003	3 yen

Dealing Fairly with Our Suppliers

Our wish is to offer high-quality products and have our customers use them with peace of mind. To do this, gaining the confidence and cooperation of our suppliers is essential.

In procurement activities, fairness is a value that counts. However, we think the basics are that we ourselves play fair first. We endeavor to build fair, equitable relationships with our suppliers, drawing a line between private and public while nurturing mutual trust. Our procurement process is made visible, and related work is performed in a transparent manner and in conformance with the rules. Our purchasing personnel are continually trained to act in "compliance" practices and encouraged to perform their work with a high moral standard.

Based on the recognition that information, drawings, materials, software, etc., which are obtained from suppliers, are important property for them, too, we keep confidential information under strict control to prevent acts in breach of the suppliers' property rights such as unauthorized transfer to a third party and usage for purposes other than permitted.

Promoting interaction with NPOs (Non-profit Organizations) and NGOs (Non-governmental Organizations)

We are affiliated with NPOs and NGOs that play an active part in many fields including the environment and society, and support their efforts.

Field	Name of organization
① Social welfare	Japan Wheelchair Basketball Federation, Japanese Red Cross Society, Life Line"Crisis Telephone Counseling", The Society for Support to Japan Oral School for the Deaf, Community Chest Office of Tokyo, Children's Cancer Association of Japan, Japan Organization for the Employment of the Elderly and Persons with Disabilities, Main Stream Association, National Federation of UNESCO Associations in Japan, etc.
②Academic research/ education	Japan Youth Volunteers Association, Japan Science Foundation, National Assembly for Youth Development, International Medical Association - Keio University School of Medicine, Youth Friendship Association, Tokyo Scout Counsel Boy Scouts of Tokyo, Supporting Committee of Tokyo YMCA, Junior Achievement, etc.
③ Art / culture	Japan Symphony Foundation, Japan Philharmonic Orchestra, New National Theater, Tokyo, etc.
④ Environmental protection	Japan Association of Industries and the Environment, The Energy Conservation Center, Japan Greenery Research and Development Center, Nippon Keidanren Committee on Nature Conservation, Mitsubishi Society for Study on Environmental Issues, etc.
⑤ International cooperation	Japan Silver Volunteers inc, Fulbright Foundation(Japan-United States Educational Exchange Promotion Foundation), Japan Overseas Educational Services, etc.
⑥ Disaster relief	The School of Safety Leaders, St. John's Ambulance, Japan, Japan Platform, etc.

Sociality Performance Overview

Recognizing the need to improve the objectiveness and transparency of the information it publicizes, MHI is running a scheme to understand its sociality performance and disclose the findings with reference to the indicators suggested in the GRI Guideline.* Those aspects of our sociality performance that are not referred to on Pages 41 through 47 are described on this page.

Each indicator is preceded by the corresponding designation used with the GRI Guideline.

(LA - labor practices and fair work conditions; HR - Human Rights; PR - product liability)

Indicator	Performance
LA3 By-area unionization ratio	The unionization ratio in Japan is 100%.
LA4 Employees are allowed to share information, be consulted or negotiate in regard to the operation of the company.	We make decisions on important issues after consultation with the union.
LA5 Recording and notification of on-the-job accidents/injuries and occupational diseases	Established procedure is such that in the event of accident or injury, whether the affected person is our own employee or a subcontractor's, the operation center concerned promptly reports the particulars to the headquarters and other operation centers. Based on the report, the procedure also requires company-wide inspection, corrective measures and employee training to prevent recurrence of similar accident or injury.
LA6 Safety & health committee composed of both workers and management	Each operation center holds a meeting of the health and safety committee made up of both workers and employee members more than once a month. The meeting discusses issues relating to health and safety and is authorized to present its views to a competent official and the head of the operation center.
LA8 Policy and program for HIV/AIDS	We tackle this problem using as a basis the "Guideline Relating to Workplace AIDS Problems" issued by the Labor Ministry and other references. Rules are set to ensure that employees are not tested for HIV infection or discriminated against in promotion or employment on the grounds of infection.
LA9 By-rank/by-range of work amount of training time	The data of 2003 remain to be summarized. The total amount of training time up to 2002 is shown on the right.
HR5 Freedom to organize a labor union	This is a right guaranteed by law. We abide by the law.
HR6 Abolition of child labor	We use no child labor whatsoever.
HR7 Abolition of forced/obligated labor	All our staff members find employment and stay with the company of their own free will.
PR2 Presentation of product and quality information	Disclosure/communication of information relating to products or services is carried out under the control of the Environment Management System and the Quality Management System.
PR3 Protection of customers' privacy	We have a "Confidentiality Management Manual" that summarizes corporate policies and important considerations to be noted to ensure that confidential materials, including customer information, are handled properly and are protected. This manual is provided to all employees, and they also receive training on this matter.

Year	2000	2001	2002
1,000 hours	1,230	947	1,042

*Global Reporting Initiative - Sustainability Reporting Guideline

A guideline presented by GRI, created as a joint project between CERES (a U.S. non-profit organization) and the U.N. Environment Program (UNEP) to provide a framework to develop a "sustainability report"

MHI's Activities (Society/Environment)	Year	Major Events, At Home and Abroad (Society/Environment)	
		Japan	World
			1948 Universal Declaration of Human Rights
		1967 Institutes "Basic Law for Environmental Pollution Control."	
1970 Completes Japan's first PWR power plant.	1970	1971 Establishes "Environment Agency."	1972 "United Nations Conference on the Human Environment" convenes in Stockholm. /"Adopts Statement for Human Environmental Quality." /"United Nations Environment Program (UNEP)" is set.
1973 Inaugurates Environment Management Department.			1976 "OECD Guideline for Multinational Enterprises" is issued.
1977 Develops "Basic Guidelines for Safety & Health Management."			
1978 Sets up Meeting of Managers, Environmental Management.			
1980 Forms Committee on Promotion of Training in the Dowa Issue.	1980		1981 "Convention on the Elimination of All Forms of Discrimination against Women" takes effect. International Year of Disabled Persons
		1985 Enacts "Equal Employment Opportunity Law."	
1987 Forms Export-Related Laws Compliance Committee.			1987 "Montreal Protocol on Substances that Deplete the Ozone Layer" is adopted.
1989 Initiates In-House Conference on CO_2 Measures.		1988 Enacts "Ozone Layer Protection Law."	
Initiates In-House Conference on CFC Measures.	1990		1990 The "Americans with Disabilities Act" is instituted.
		1991 "Keidanren's - Global Environmental Charter" is established. Establishes "Child Care Leave Law." "Keidanren Charter of Corporate Behavior" is established.	
1992 Committee on Promotion of Training in the Dowa Issue is renamed Committee for Raising Awareness of Human Rights. Forms "Committee for the Promotion of Employment of Disabled People."		1992 Ministry of International Trade and Industry requested a Voluntary Plan on the Environment.	1992 "United Nation's Conference for the Environment and Development (Earth Summit)" convenes in Rio de Janeiro. / "Rio Declaration on Environment and Development" is adopted. / "Agenda 21" is adopted.
1993 Draws up "Our Approach to Environmental Problems," MHI voluntary plan.		1993 Institutes "Basic Environmental Law."	1994 "Caux Round Table - Corporate Activity Guideline" is established.
		1995 "Child Care Leave Law" is revamped into "Child Care and Family Care Leave Law."	1995 "The 1st Meeting of Conference of Parties (COP1) to Convention on Climate Change" convenes in Berlin.
1996 Establishes "Environmental Policies," and forms Environmental Committee.		1996 "Keidanren Charter of Corporate Behavior" is revised.	1996 ISO14001 is instituted. / "The 2nd Meeting of Conference of Parties (COP2) to United Nations Framework Convention on Climate Change" convenes in Geneva.
1997 Our Yokohama Works becomes the first ISO14001-accredited organization of Japan's heavy-duty equipment manufacturers Starts to sell R410A-compatible air-conditioner. (R410A: A new-type environmentally friendly cooling medium)		1997 "Keidanren Voluntary Action Plan on the Environment" is drawn up.	1997 "The 3rd Meeting of Conference of Parties (COP3) to United Nations Framework Convention on Climate Change" convenes in Kyoto.
1998 Develops system that thermally decomposes PCBs contained in industrial effluent.		1998 Institutes "Law Concerning the Promotion of Measures to cope with Global Warming" Institutes "Law to Promote Specified Nonprofit Activities"	1998 "The 4th Meeting of Conference of Parties (COP4) to United Nations Framework Convention on Climate Change" convenes in Buenos Aires.
1999 Completes delivery of a combined cycle power plant incorporating M701G, a gas turbine with the world's highest efficiency rating.		1999 Enacts "Law of Releases to the Environment of Specific chemical substances and Promoting Improvements in Their Management" (PRTR law). Institutes "Law Concerning Special Measures against Dioxins."	1999 "The 5th Meeting of Conference of Parties (COP5) to United Nations Framework Convention on Climate Change" convenes in Bonn.
2000 All the manufacturing bases (13 operation centers) obtain ISO14001 certification.	2000	2000 Introduces "The Basic Law for Establishing a Recycling-based Society." Revises "Law for the Promotion of Recycled Resources Utilization." /Enacts "Construction Recycle Law." /Enacts "Food Recycle Law." Institutes "Law on Promoting Green Purchasing."	2000 "The 6th Meeting of Conference of Parties (COP6) to United Nations Framework Convention on Climate Change" convenes in Hague. /"The United Nations Global Compact" is instituted. / "GRI Guideline Version 1" is announced.
2001 Engineering Sector is awarded ISO14001. Forms "Compliance" Committee.		2001 Founds "Ministry of the Environment."/ Institutes "Law Concerning Special Measure against PCB waste." /Institutes "CFC Reclamation/Destruction Law."	2001 "The 7th Meeting of Conference of Parties (COP7) to United Nations Framework Convention on Climate Change" convenes in Marrakech. /ISO Council begins a study on the feasibility of establishing CSR international standard.
2002 Sets medium- to long-term environmental activity goals.		2002 Sets "Soil Pollution Prevention Law." /Ratifies "Kyoto Protocol." /Nippon Keidanren revamps "Nippon Keidanren's Charter of Corporate Behavior." /Ministry of Economy, Trade and Industry holds the 1st meeting of CSR Standardization Committee./ Revises "Law concerning the Rational Use of Energy."	2002 "World Summit for Sustainable Development" convenes in Johannesburg. /"The 8th Meeting of Conference of Parties (COP8) to United Nations Framework Convention on Climate Change" convenes in New Delhi. "GRI Guideline Version 2" is announced.
2003 Forms "Construction Business Act Compliance Committee."		2003 Ministry of the Environment implements a trial project for the transaction of greenhouse gases emissions. /Strengthen emissions standards for diesel vehicles. /Japan Committee for Economic Development releases the 15th Corporate White Paper entitled "Evolution of Market and Social Responsibility-Minded Business Management." /Revises "Law for Disposal of Waste."	2003 The 1st study meeting is held to discuss a treaty on the safety of radioactive waste management. / "The 9th Meeting of Conference of Parties (COP9) to United Nations Framework Convention on Climate Change" convenes in Milan.

Comments of Third Party

The Okuma School of Public Management,Waseda University
Prof. Masayasu Kitagawa

MHI will commemorate the 120th anniversary of its founding this year. The company has evolved its "Environmental Report" focusing on existing environmental conservation and created a "Social and Environmental Report" corresponding to Corporate Social Responsibility (CSR).

Greetings by President Tsukuda strongly support the idea using the expression, "message from the president." In his greetings, he says, "We will manage the company with full commitment to our Corporate Social Responsibility (CSR)." He clearly shows his vision and mission applying the expression "manage the company with full commitment to," which was not mentioned in the previous Environmental Report. Following the title, saying, "We will fulfill our Corporate Social Responsibility (CSR) through company business for the well-being of the people of the world," this report shows the relationship with the stakeholders on the two facing pages featuring the external issue of creating a sustainable society. I appreciate their approach, which is very positive and has never before been seen in MHI.

The details of the report show the current situations, goals, and numerical values to a large extent based on their vision and mission; however, qualitative expressions are seen more often in social reports than environmental reports.

I feel this report is very rigorous as a whole. What attracted me most were comments by the staff in charge. For example, the group leader of the Machinery Headquarters says, "Visitors from overseas were amazed at our test plant." This really warmed my heart. The Director of the Mitsubishi Minatomirai Industrial Museum said in her greetings, "It will be my great pleasure if a museum visitor becomes a scientist in future," which shows her characteristic style. I think there should be comments which are sometimes eye-catching, sometimes surprising, and sometimes heartwarming. I recommend that MHI write the following statement on the last page: "Thank you for reading to the end. We welcome your comments, and we will make the most of your valuable advice for our future activities."

Chair, Environmental Auditing Research Group, Member, BoD of GRI
Toshihiko Goto

For companies, particularly MNEs, there are various expectations, including the role which used to be played by the states, from multi stakeholders and general society due to the progress in globalization. These companies are trusted when they understand and respond to these expectations, and this is CSR. It is impressive that the president makes a commitment saying, "We will promote various project ... with full commitment to CSR...". I suggest the company set up a cross-sectional department responding to CSR in terms of the administrative system.

Reading Special Features 1 & 2, I feel that the company has been dealing business with adversity in "selection and concentration," which is the current general trend in regard to the business strategy. Since the company is characterized by being an order-receiving industry according to the business outline, its own trend seems to be natural. However, as an expert on CSR and sustainability, I am a little worried about the company's own trend. Combining various values and techniques in the four business categories and starting by considering energy, food and water, the company should establish aggressive, strategic policies contributing to sustainability. For example, would it be possible to think about developing power generation on the ocean and fishing banks combining ocean-development technology and wind power generation together with the government, municipality and citizens? It is critically important for Japan and other states to improve its self-sufficiency rate of energy, offcourse I understand that it is impossible to rely only on renewable energy sources.

The report mainly covers only Mitsubishi Heavy Industries, Ltd., but as a giant company group, I hope the company will prepare a consolidated report of the Mitsubishi Heavy Industries Group as soon as possible. Regarding the environmental section, the link between the conduct guideline and mid- and long-term objectives is somewhat unclear. I also expect more detailed information about the balance of materials in the future.

In relation to the social and economic sections, I would like you to consider quantification within the next few years. The company's CS (customer satisfaction) activities based on the customer creed are excellent, and therefore I expect you to quantify customer satisfaction also. Finally, I suggest you include negative information more.

After receiving valuable comments

Environmental Committee Chairman
Managing Director
Ikuro Nagata

On the publication of MHI Social and Environmental Report (CSR report) 2004, we asked Prof. Kitagawa and Mr. Goto to comment. They gave us their valuable opinions, for example, “the report is generally rigorous” and “efforts should be made to quantify qualitative expressions in social and economic sections.”

We drastically renewed the previous environmental report, and in publishing a new Social and Environmental Report, we included many articles discussing a variety of topics. We already regret this.

We would like to reflect those areas pointed out by the commenters in the future reports to create an easier report that makes one feel human activities and warmth. Along with our vision and mission described in the report, the whole company will enhance more substantial corporate activities to realize a bright future of the people of the world.

Comparative Table with GRI Guideline 2002

In preparing this report, we referred to GRI Guideline 2002.
The following table shows the details described in GRI Guideline 2002 and the listed pages in this report.

GRI Guideline		Relevant page in this report
1 Vision and Strategy		
1.1	Statement of the organization's vision and strategy regarding its contribution to sustainable development	1、3、4、7-16
1.2	Statement from the CEO (or equivalent senior manager) describing key elements of the report	3-4
2 Profile		
Organizational Profile		
2.1	Name of reporting organization.	**1**
2.2	Major products and/or services, including brands if appropriate.	9-16、25
2.3	Operational structure of the organization.	25-26
2.4	Description of major divisions, operating companies, subsidiaries, and joint ventures.	25-26
2.5	Countries in which the organization's operations are located.	1、25-26
2.6	Nature of ownership; legal form.	1
2.8	Scale of the reporting organization.	1、25-26
2.9	List of stakeholders, key attributes of each, and relationship to the reporting organization.	5-6
Report Scope		
2.10	Contact person(s) for the report, including e-mail and web addresses.	17、39、Back cover
2.11	Reporting period (e.g., fiscal/calendar year) for information provided.	2
2.12	Date of most recent previous report (if any).	2
2.13	Boundaries of report (countries/regions, products/services, divisions/facilities/joint ventures/subsidiaries) and any specific limitations on the scope.	2、25-26
Report Profile		
2.18	Criteria/definitions used in any accounting for economic, environmental, and social costs and benefits.	33 (Environmental Accounting balance)
2.22	Means by which report users can obtain additional information and reports about economic, environmental, and social aspects of the organization's activities, including facility-specific information (if available).	Back cover
3 Governance Structure and Management Systems		
Structure and Governance		
3.1	Governance structure of the organization, including major committees under the board of directors that are responsible for setting strategy and for oversight of the organization.	27-28
3.6	Organizational structure and key individuals responsible for oversight, implementation, and audit of economic, environmental, social, and related policies.	27-28
3.7	Mission and values statements, internally developed codes of conduct or principles, and polices relevant to economic, environmental, and social performance and the status of implementation.	1、3-4、7-16、27-28、29(Basic Policy on Environmental Matters)
Stakeholder Engagement		
3.9	Basis for identification and selection of major stakeholders.	5-6
Overarching Policies and Management Systems		
3.13	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	27-28、38
3.15	Principal memberships in industry and business associations, and/or national/international advocacy organizations.	47
3.16	Policies and/or systems for managing upstream and downstream impact.	39、41-42
3.19	Programs and procedures pertaining to economic, environmental, and social performance.	27-28、29-30
3.20	Status of certification pertaining to economic, environmental, and social management systems.	29-30

4	**GRI Content Index**		
	4.1	A table identifying location of each element of the GRI Report Content, by section and indicator.	51-52
5	**Performance Indicators**		
	Economic Performance Indicators		
	EC1、EC2	Net sales., Geographic breakdown of markets.	25-26
	EC6	Interest and dividend	47
	Environmental Performance Indicators		
	EN3	Direct energy use segmented by primary source.	34
	EN17	Initiatives to use renewable energy sources and to increase energy efficiency.	9-10、17-18、21-22、33、35、39
	EN5	Total water use.	34、36
	EN22	Total recycling and reuse of water.	36
	EN8	Greenhouse gas emissions.	34, 35(Only regarding CO_2)
	EN11	Total amount of waste by type and destination.	34、36
	EN12	Significant discharges to water by type.	36
	EN14	Significant environmental impact of principal products and services.	17-24、33-34
	EN35	Total environmental expenditure by type.	33
	Social Performance Indicators		
	Labor Practices and Decent Work		
	LA1	Employment (nationality, full-time/part-time employment, etc.)	26
	LA3-4	Employer-employee relationship	43、48
	LA5、LA7	Health and safety (morbidity rate, number of job-related deaths, etc.)	44、48
	LA6	Official joint health and safety committee consisting of both top management and workers' leaders	48
	LA8	Description of policies or programs (for the workplace and beyond) on HIV/AIDS.	48
	LA9	Average hours of training per year per employee by category of employee.	43、48
	LA10	Description of equal opportunity policies or programs, as well as monitoring systems to ensure compliance and results of monitoring.	44
	Human Rights		
	HR1	Description of policies, guidelines, corporate structure, and procedures to deal with all aspects of human rights relevant to operations, including monitoring mechanisms and results.	27-28、44
	HR4	Measures against discrimination	28、44
	HR5	Freedom of union formation and collective negotiations (policies)	43、48
	HR6	Child labor (policies for elimination)	48
	HR7	Forced labor, imperative labor (policies for elimination)	48
	Society		
	SO1	Control of effects on local communities	38、45-46
	SO2	Bribery and corruption (policy)	28
	SO3	Political donation (policy)Product Responsibility	28
	Product Responsibility		
	PR1	Health and safety of customers (policy)	28
	PR2	Products and services (policy)	48
	PR3	Protection of customers' privacy	48

MITSUBISHI HEAVY INDUSTRIES, LTD.

Cover Message

MHI, as experts in manufacturing products, provide various technologies and products that support the social infrastructure. We consider each of them to be essential in making people's lives fulfilling.

We also believe that succession of technology and fostering the next generation who will create the future world are important social contributions, and thus we have opened the Mitsubishi Minatomirai Industrial Museum to cultivate children's interest in manufacturing.

The photographs are of children attending a handicraft class where pupils are thinking seriously on their own and enjoying manufacturing handiwork.

Looking at these photographs, we strongly feel that some of these children will become excellent engineers and scientists creating an affluent future.

MHI will make continuous efforts to provide technologies and products for creating a sustainable society, and to foster the next generation as well as to engage in environment conservation activities to hand over a verdant earth to the next generation with pride and responsibility.

If you have any inquiries about this report, please contact the following division :

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