Please direct inquiries about this Environmental & Social Report to:
Planning Group
Corporate Social Responsibility Dept.
Yanmar Co., Ltd.
1-32 Chayamachi
Kita-ku Osaka 530-8311 Japan
TEL: 06-6376-6258
FAX: 06-6373-9272
http://www.yanmar.co.jp/
Corporate Profile

- **Trade name**: Yanmar Co., Ltd.
- **Head office**: 1-32 Chiyamachi, Kita-ku, Osaka
- **Tokyo office**: 2-1-1 Yaesu, Chuo-ku, Tokyo
- **Founded**: March 1912
- **Capital**: ¥63 billion
- **Chairman & Executive Director**: Taisuke Yamada
- **Turnover (fiscal year 2008)**: ¥948.2 billion (consolidated base) ¥221.6 billion (company base)
- **Employees (as of March 30, 2009)**: 15,145 (consolidated base) 3,292 (company base)

**Major Indicators**

- **Consolidated Sales and Ordinary Profit**
- **Employees (consolidated)**
- **Ratio of Consolidated Sales by Region in 2008**
- **Ratio of Consolidated Sales by Line in 2008**

**Major Changes in 2008**

- The second plant of Yanmar America, Atlanta was completed (March 2008).
- The YLS Kobe Center started full operations as a global service base (April 2008).
- The Technical Center of Yanmar Engine (Shanghai) Co., Ltd. was opened (June 2008).
- Companies selling agricultural equipment to the domestic market were integrated into our Yanmar Agricultural Equipment Sales Co., Ltd. (December 2008).
- The Technical Center of Yanmar Europa B.V. was opened (December 2008).
- Yanmar Agriculture Equipment Co., Ltd. was merged into Yanmar Co., Ltd. to realize structural reform of our agricultural equipment business (February 2009).

**Editorial Notes**

We issue this Report every year to inform Yanmar Group stakeholders of the philosophies, policies, and actions the Group has taken with respect to the environment and society as well as the records of our activities in fiscal year 2008 so as to improve our activities through mutual communication.

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**Period Covered**

The activities and data disclosed in this Report are for the period of fiscal year 2008 (ending March 30, 2009). However, the Report also includes some items occurring in fiscal 2009.

**Sites Covered**

In general, the information in this Report applies to the Yanmar Group as a whole. Information specific to Yanmar Co., Ltd. or any particular area or related company is indicated as such in the text.

The term “Shiga Zone” used in this Report refers to plants located in Shiga Prefecture. Biyu, Yanamino, Kikumen, Daimon, Nishigaoka, and the Nishigaoka Site. The term “Amagasaki” used in this Report refers to the Amagasaki and the Takasugi plants.

**Date of Issue**

Published in September 2009 (the last issue is scheduled for September 2010).
Executive Notes

We issue this Report every year to inform Yanmar Group stakeholders of the philosophies, policies, and actions the Group has taken with respect to the environment and society as well as the records of our activities in fiscal year 2008 as to improve our activities through mutual communication. This issue Reports some of our typical activities in the opening pages of Highlights in hopes readers understand how the Group is trying to achieve its missions and responsibilities as a good corporate citizen. The pages on our social responsibilities provide an outline of our management system and feature some of our actual activities as examined and evaluated through our environmental activities Report our activities conducted according to the secondary medium-term plan.

Reference Guidelines

1. Information in this Report is mainly based on reports issued by the Ministry of Finance. These guidelines are issued by the Ministry of Environment. For your reference, the Report is based on the Guidelines of the Global Reporting Initiative (GRI) criteria.

Period Covered

The activities and data disclosed in this Report are for the period of fiscal year 2008 (April 1, 2008 to March 31, 2009). However, the Report also includes some items occurring in fiscal 2009.

Sites Covered

In general, the information in this Report applies to the Yanmar Group as defined in the Information in the Sites Covered section. It should be noted that the Group is not limited to all of Yanmar’s companies, only the companies that have been chosen for inclusion in this Report. This means that in some cases, the Group may include companies that are not part of the Yanmar Group.

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Overseas Group Companies

Yanmar Co., Ltd. (Headquarters)

Asia

Yanmar Co., Ltd.

Europe

Yanmar Europe B.V.

North & South America

Yanmar Industry Co., Ltd.

Sales / Services

Yanmar Marine Inc.

Research & Development

Yanmar Technology, Inc.

Domestic Group Companies

Yanmar Casting Technology Co., Ltd.

Yanmar Construction Equipment Co., Ltd.

Yanmar Engineering Co., Ltd.

Yanmar Engine Co., Ltd.

Yanmar Engineering Co., Ltd.

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Yanmar Co., Ltd.
Contributing to our customers and to society through "Comprehensive Power" and "Solutioneering"

We are developing businesses in the major fields of "urban," "the land" and "the sea," in light of the Yanmar Group Mission of "We, the YANMAR Group, will strive to create new and meaningful value together in partnership with our worldwide customers. We will be innovators and leaders in harnessing energy, while contributing to an environmentally sustainable society, through the delivery of unrivalled products and services." To go with this mission, we introduced in the spring of 2009 a new brand concept — "Solutioneering.* Your Everlasting Smile.

So far, to fulfill our corporate mission, our undertakings have focused on the development of fuel-efficient, performant and durable technologies and products, and the provision of world-class services. Yet at the same time, the environment that surrounds us continues to experience major shifts. Priority is being put on the global environment in terms of "creating sustainable societies," and rapid advances are taking place with globalization and information. I believe that we must also respond quickly to these changes.

Meanwhile, the needs of our customers are shifting within this environment. Such changes include an ever-increasing number of items that transcend previously prescribed business fields.

To deal with these developments, I think we need to concentrate all of the management resources in our possession. I also believe that the supply of solutions using our comprehensive power will become imperative in future business and that fulfilling this role should be one of our missions for our customers.

We collect and employ our engineering technologies in a wide variety of fields and then strive to solve the problems that beset our customers. The process brings smiles to the faces of our customers and a sense of involvement and joy to our employees. That's the kind of brand we aim for at Yanmar.

Specifically, we are adapting GHP (gas heat pump) air-conditioning technology for agricultural facilities, developing a next-generation power-generation system that makes effective use of digestive gases emitted when the waste of livestock is treated at farms, and are involved in bio-fuel and engine research for the realization of carbon-neutral motors.

Furthermore, in the agricultural and fishing industries, we not only provide products and after-sale service, but we also leverage our cryogenic technologies and group-company networks to connect production areas (farming and fishing villages) with consumption areas (cities). Our involvement in the creation of this new business model is one example of Solutioneering. Nothing makes us happier than when we can contribute to the vitalization of regions that fostered Yanmar in the past. I believe that this is one of our social responsibilities that we must achieve.

To develop this form of Solutioneering, it is imperative we work harder to examine business from the perspective of our customers. Our VOC ("Voice of Customer") project was launched in January 2008. We have since been continuously listening to the voices of our customers and moving ahead in the new direction of a customer-oriented business model.

As you will learn in this report, Yanmar is engaged in various efforts, including the research and development of environmental technologies, environmental conservation, and contributions to society. In the future, we will closely abide by our corporate mission and the concept of Solutioneering and do our utmost to meet rapidly changing market needs, strive towards the realization of an environmentally-sustainable society, and carry out business activities that contribute to society.

Takehito Yamada President

* "Solutioneering" is a term we coined that combines the words "solution" with "engineering." "Engineering" indicates manufacturing with engines at its core and "Solution" indicates finding solutions to problems that affect our customers.
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Providing sustainable products and high quality service in the fields of “urban,” “the land” and “the sea” to meet customer needs

Living-environment businesses that harmonize the city mechanism with a comfortable lifestyle

GHP (gas heat pump air conditioners)*1 and cogeneration systems*2, which are used in response to energy and environmental problems, as well as regular and emergency power-generation equipment, help maintain comfort and safety in various aspects of living. In addition, we are working for the effective use of energy in our systems to convert to biomass-generation systems, which use carbon-neutral biomass as fuel that has no effect on the increase of CO2 when burnt, and to thermal energy, which uses warm water, steam and other resources. Also, small construction machinery and general-purpose machinery, mounted with highly efficient and low-fuel consuming diesel engines, have been shown to be effective in high efficiency, labor-saving operations. Such environmental measures are being employed in the building of our streets and towns.

*1 Air-conditioning systems that produce low amounts of CO2 emissions and are equipped with gas engines rather than electric motors to drive the compressors, which circulate the refrigerant.
*2 Systems that generate electricity by burning gas as fuel and then effectively use the heat to supply hot water or for air conditioning.

Total support, from manufacturing to distribution, as we pursue safe and abundant “food.”

We contribute to the development of agriculture in all the relevant fields, from mechanization of individual tasks (by tractors, rice transplanters, combine harvesters, etc.) to uniform systemization (NAPURA systems) and facilitation. In addition, we have shown positive results in food distribution, whereby the food remains very fresh and operations are carried out at low cost. This is achieved through “transport cool containers,” which enable fresh food products to be distributed at the right temperatures.

Seeking to achieve the ideal co-existence between humans and the sea in the fields of marine leisure, fisheries, and the development of large-scale marine engines

We have been enhancing our lineup of marine engines and pleasure boats to give people the opportunity to discover the wonders of the sea. Also, through efficient and high-output marine engines and the development of fishing boats as well as various machinery and facilities, we are contributing to the revitalization of the fishing industry, which provides us with our food. Furthermore, we are working on the pursuit of safer and comfortable sea journeys that take the Earth and the environment into consideration, through our improvements in the performance of diesel engines for large-scale ships and research and development of an electric propulsion system.*3

*3 A propulsion system that powers ships using propellers, whereby the propellers are connected directly to a motor that runs on electricity generated by a diesel engine.
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A powerboat engine, widely used in the USA, Europe and other world markets. The engine has high output and is environmentally friendly.

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Yanmar’s Large Power Products Operations Division produces large marine engines and power-generation engines. These products have a long lifespan, normally being used for 20 to 25 years. During this period, it is crucial for the engines to maintain their performance in terms of product safety, economy, and environmental friendliness, and for us to continue our bond of trust with our customers.

Accordingly, in 2005 the Large Power Products Operations Division embarked upon a new business model that enhances “Life Cycle Value.” We need to develop products in cooperation with our customers and then pursue value for our customers for periods long after the products’ delivery, while carrying out services that include providing solutions and education. So we have sought approaches that have an eye on “offering products and services with customer focus.”

Seeking to work with our customers to create product value for them, while working on business models that improve our customers’ trust in us

Hiroshi Ihara
Senior Executive Officer at Yanmar Co., Ltd and General Manager of the Large Power Products Operations Division. He joined the company, then called Yanmar Diesel Co., Ltd., in 1977. After spending seven years, Yanmar’s overseas operations, he was appointed General Manager of the Sales Department in 1990. He was appointed Executive Officer at the Engine Department and Manager of the Engine Product Marketing Department in 2002. In 2004 he was appointed Executive Officer and Manager of the Large Power Products Operations Division and Manager of the Large Power Products Marketing Department as well as concurrently holding the position of President of Yanmar Engineering Co., Ltd. He became an Executive Officer at Yanmar Co., Ltd., and General Manager of the Large Power Products Operations Division in 2008. He has held his present posts since March 2009.

The Large Power Products Operations Division supports the global marine transport business

The Large Power Products Operations Division has a long history, even among Yanmar’s diverse business activities. The headquarters has made great strides in its business endeavors, in parallel to the growth of the global marine transport business. The base of these operations is our Amagasaki Plant. As a factory that produces the world’s first practical diesel engine, it has become a production factory for large diesel engines. Being an urban-type factory, the facility is engaged in environmental conservation efforts. During fiscal 2008, the plant operated dozens of tours for visitors to observe the factory’s operations, and its activities also include education of students at the Technical Training School, etc.

LCV (Life Cycle Value) aiming to create value together with our customers

The mission advocated by the Large Power Products Operations Division is “to provide market leading products and services.” In pursuit of this mission, sales, development, and production operations were amalgamated while restructuring got under way. A new business model that aimed to achieve “LCV Enrichment” was launched in 2005. The Hispan of large ocean-going ships, which sail the great oceans of the world, is 20 to 25 years. We started thinking with the idea that this life cycle is extremely long compared to other products. The current Senior Executive Officer and General Manager of the Large Power Products Operations Division, Hiroshi Ihara, who spearheaded the reform as the General Manager of the sales department at the time, offers a definition of LCV:

“We start our sales efforts three years before engines are delivered. We gain the trust of our customers, deliver the engines, and when the ships’ construction is completed. However, the objective of ship owners, who are the customers, is to use the ship and earn profits from it for a long period afterward, of 20 to 25 years. The real job starts after the product’s delivery. The thinking behind LCV is to try to work with customers in pursuit of value for them. It’s very important to stick together during the various events that take place during those 25 years.”

It is not easy to build the trust of our customers during a period of 25 years. Various factors are involved in maintaining a relationship of trust, such as human factors, environmental factors, speed, credibility, information, and services. Improving LCV requires keeping all these factors in mind at the same time. When the time comes 25 years later for our clients to replace their ships, our aim is that they will choose us and say, “Right, let’s make it Yanmar.” That is a
Yanmar’s Large Power Products Operations Division produces large marine engines and power-generation engines. These products have a long lifespan, normally being used for 20 to 25 years. During this period, it is crucial for the engines to maintain their performance in terms of product safety, economy, and environmental friendliness, and for us to continue our bond of trust with our customers.

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Business models that enhance Life Cycle Value

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Improving development processes that enable “pre-establishment of quality”

The number of units produced and ordinary income at the Large Power Products Operations Division rose rocketed from 2005—when we started to restructure under the LCV banner—until 2008. So what changes occurred during the restructuring?

One was improvements in the development processes. Before, the development departments were central when products were made, and sales staff then proposed these products to our customers. The sales and after-sales service departments were mainly the points of contact with customers. The people in charge of development would never directly meet with the customers. Development that takes place in a situation where the needs of the customer aren’t correctly understood can get bogged down during testing. Many modifications are made as products are sent back due to problems that crop up after delivery. As a result, the customer’s trust is lost.

“Development process improvement was a prerequisite to LCV enhancement,” says Katsunori Izumi, Manager of Design Group 1, Development Department 1, Development Department at the Large Power Products Operations Division. “From the planning stage, we had customers involved in the planning and we heard a lot of discussion about the various demands the customers had. Demands that were reflected in the design of the products. In addition, before building the prototypes, we asked our customers to be able to carry out preliminary and verification testing with the actual engines: the engines would be used (for instance, operations running on heavy fuel) while on board. This process enabled us to establish quality during preliminary development, and so post-delivery modifications decreased,” he says.

The reliability of products with a long lifespan cannot be fully understood merely by conducting ground tests in factories. So we carry out testing on customers’ ships during the early stage of product development. There might be doubts whether our customers are happy to comply with this. However, Mr. Ihara responds by saying:

“Both the engineers at the ship-making companies and the engineers at this factory are cooperative. Companies that own a large number of ships generally use engines from various manufacturers, yet the areas that wear are generally the same. The owners often say things like, “Well, try mounting a Yanmar engine on one of our ships once.” Since we deal with the same worries, they work with us in efforts to create things. I also think it’s indispensable to LCV improvement to build ties of co-existence and co-prosperity with our customers.” This joint work becomes an opportunity to construct mutual ties with the customer. It’s also connected to the idea of making products that have received the consent of the customer and making products that are loved by the customer.

Supporting our customers and widening human exchanges through “TOP Subcommittee Activities” and “TT School”

The TOP Subcommittee Activities are another policy for LCV improvements. This is based on the idea of the necessity to heighten customers’ LCV through services in order to win their trust, and it is an activity that completes customer services after a product’s delivery.

As Mr. Ihara explains: “We identified tasks that emerge crosswise throughout the departments and then established the subcommittees. By streamlining associations in order to solve problems within a subcommittee or among the subcommittees, we increased the speed of TOP (Tokiki Quality Plan: “Tokiki” being the abbreviated Japanese name of the Large Power Products Operations Division) realization. Due to this, the number of complaints has fallen, and we are seeing contributions to higher profit ratios.”

Mr. Ihara adds: “When a ship owner designates Yanmar, then that’s also important for the education of the engineers.” The T.T. (Technical Training) School is joined with the Amagasaki Plant, along with a guesthouse for accommodation. The school carries out training on engine technology and maintenance, not only for company employees, but also for ship owners and engineers from shipbuilding facilities in Japan and overseas.

Within the company, meanwhile, the handing down of engineering skills to the younger generation has become an urgent issue, due to the large number of skilled engineers who will be approaching retirement age in the near future. The T.T. School established a skills transmission committee made up of former employees and our main engineering corps in 2008. This body conducts follow-up training sessions, divided by levels, while also restructuring the system whereby technical skills are passed on.

Through the switch to a development process in which customers take part, the internal TOP Subcommittee Activities, and utilization of the TT School, we have seen the emergence of positive affects that were originally unimagined. The wheels of human exchange inside and outside the company are expanding. We are seeing lively communication—which never took place before—among co-workers who used to keep to themselves even though working at the same Amagasaki Plant, as well as among developers inside and outside the company and service providers.
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Report

The 6EY18 Model was born in our new development process

Katsunori Izumi
Manager of Design Group 1, Development Department 1, Development Department at the Large Power Products Operations Division.

The 6EY18 model is a new product (on sale from June 2007) that was born from the nice development process that aims for LCV improvements. Previous engine development focused on trying to get “performance” — either high output or fuel economy. But what our customers hope for is “performance plus reliability.” In other words, we must ensure operation without problems cropping up suddenly.

Running engines on heavy fuel will dirty the combustion chambers, strain the turbochargers, create blow by for the intake and exhaust valves, and cause abrasion to the piston rings and cylinder liners. In addition, dirty lubrication of causes abrasion to the various sliding parts and the prompt clogging of the lubricating oil chians. These problems were in our mind during the development of this engine, and so we incorporated new technologies to suppress contaminants. We also managed to boost the engine’s initial reliability and endurance by equipping it with an application to deal with moderate amounts of contaminants without any loss of performance, which we thought was connected to LCV improvement.

Future engine development will involve not only the development departments but will also bring together sales, manufacturing, procurement and service departments as we work on projects. We think it will be important to be able to complete a product’s development through both communication and preliminary testing with our customers during the development stage.

The 6EY18 Model was born in our new development process
Aiming for high-quality service engineering and the expansion of networks

One of the policies at the Large Power Products Operations Division is to use our environmental technology and engineering strengths to tackle the challenges of marine transport. With the keywords “environmental sustainability,” “labour-saving technologies,” and “safety response,” we are making efforts in technology to deal with NOx (nitrogen oxide) regulations of the IMO (International Maritime Organization) and in the development of electric propulsion ships.*

In the following passage, Mr. Ihara gives us his thoughts on the future of the Large Power Products Operations Division. “If we imagine our customers as being the audience in a theater, then our ‘performance’ would not merely be the engine, but rather the entirety of our services and the achievement of LVQ. Products with a long lifespan bounce around all over the place.

They’re used on second-hand ships that sail all over the world, and we have no idea where they will be in the world when service is required. Since we can’t simply replace the engine, as with a car, we must get aboard the ships during their voyages to do the repairs. Maintaining service bases throughout the world is very difficult. But this in itself provides a business opportunity, as we can put our efforts into expanding our high-quality service engineering and global networks.

Mr. Ihara’s dream is the creation of a control center capable of knowing in real time the current location of ships equipped with Yanmar engines, by using a global map. If this occurs, then a system to rush to the scene could be quickly established. Yanmar engines move across the world’s oceans and tie together the world’s cities. Through development that involves our customers and services that seek value for our customers, that sense of trust is expected to rise steadily.

Aiming for “an open factory” to the community and to society, while the factory is being reformed

The Amagasaki Plant is striving to improve the local scenery and reduce noise, as the factory is located in an area with many houses. Work to replace the factory’s south wall, which is adjacent to some detached houses, was carried out in January 2009. Trees were planted outside the wall and street lights installed, to the satisfaction of the residents. For the sake of a cluster of condominium buildings to the east of the factory, the direction of exhaust pipes of six factories was altered and mufflers installed, reducing noise in other measures carried out in the interest of environmental conservation, low energy lighting and a sewage treatment system that separates oil and water will be introduced.

Yasuhiro Kanai
Manager of the Production Engineering Group at the Large Power Products Operations Division.

Workers replace the factory’s south wall.

Yanmar has been dispatching staff to the Japanese Antarctic Research Expedition since the 25th expedition in 1983 to manage the power-generation equipment at the Showa Base. By the time of the 51st expedition in 2009, a total of 38 Yanmar employees had taken part in this project. I myself took part on the 49th Japanese Antarctic Research Expedition in 2007 as the person responsible for the power-generation equipment throughout the winter. At the Showa Base, two S165 Models, used as power generators, are switched every 500 hours (approximately 20 days). Yet during the 49th expedition, I did an overhaul of generator No. 1.

Apart from 500-hour inspections when the base’s power source was switched, I was also responsible for construction work on base equipment, roadwork, observation support, snow removal, maintenance of generators in observation cabins, supporting an inland observation tour, and so on. I was also involved in “Antarctic Classroom” (held about 40 times a year), which links the Showa Base with schools in Japan via an Internet TV-conferencing system for lectures.

Yanmar’s Cogeneration System that is employed at an Antarctic base

Yanmar has been involved in the development and production of gas engines from early on. Its cogeneration system, which uses clean natural gas and delivers “electricity and heat,” is used in various industrial fields and also at the Showa observation base in the Antarctic.

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Other activities

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* These are ships equipped with a system to run motors and drive propellers using electrical power from a generator. From the proposition of ships to supplying power to shipboard equipment, the system can handle all of a ship’s needed electrical energy. At the same time, it can achieve lifecycle cost reductions, a high degree of automation, and reduced emissions. The system can make the ships more efficient by increasing the reliability of systems that lead to improved safety. Furthermore, the system can be used to share power and save energy and cut a ship’s emission of CO2, NOx and SOx, enabling sea journeys that are friendly to humans and the environment. The systems are seeing wider use in recent years, from various types of commercial vessels, to survey ships and fishing boats.
Aiming for high-quality service engineering and the expansion of networks

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Parts used for engine maintenance must be compatible with the items at the base, until the time the next expedition arrives. In addition, all the staff, I was the only one whose job involved the engines. So I had to resolve problems using my own judgment. While single-handedly taking care of the likeliness of electricity, air-conditioning and hot-water supply, I felt the pressure daily of being the only one responsible and of the necessity that observation activities not be interrupted.

The moment I felt the real value of this work was when the engines performed without incident and the staff could do their activities without having to worry. This is definitely a job that isn’t noticeable on the surface. Yet the operation tendencies of the engines had been passed down from each of our predecessors in the form of data files. I was uplifted by thinking that “There is no way that these Yanmar engines that have been maintained by those before me will break down.” That let me carry out my duties. If I had the chance, I would take part again.

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**A global customer service system that supports the Yanmar brand**

From early in its history, Yanmar has managed to expand its business fields to markets overseas, and to date our products are loved by customers in 130 countries. We are aiming towards a 100% repeat business and striving to establish a service system that would be fully consistent throughout the world. As part of this plan, we have developed a uniform-management system of parts that is in use globally. We completed Kobe Center, Yanmar Logistics Service Co., Ltd., in April 2008 as a warehousing hub center for Yanmar throughout the world. Thanks to this, we are now able to deliver Yanmar parts quickly and precisely to every corner of the world.

The creation of a global system that responds to the needs of our overseas customers has been the focus of our efforts.

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**Creating more satisfaction for customers throughout the world**

Yanmar is developing business through a four-pole system comprising Europe, America, Southeast Asia and China, while aiming to carry out appropriate support for all customers involved with Yanmar products. Yet surmounting language and cultural barriers and satisfying the demands of the world are no easy tasks.

So in March 2006, with the objective of offering consistent customer service throughout the world, we launched the Global Customer Service (GCS) Department at the head office in Osaka. Three service departments — parts, technology and logistics — which had previously operated separately in Japan and overseas — were all amalgamated to become a unit with a total workforce of about 100 people.

As GCS Chief Manager Masafumi Yoshino explains: “It’s important to offer the three services of parts, technology and logistics as a single solid block. Even if you have the item, it’s useless if it can’t be delivered to the customer. If you’ve only got the parts, then you can’t do the repairs. And if you can’t share all of your information concerning your products, then there’s no point. That’s the premise behind our way of thinking. Our job is to tie together the strings of service that cover all of Yanmar’s vast territories. From the point that our area is on a global scale and that our target is all of Yanmar’s products, then our work covers a diverse range.

As a basic policy of GCS, “The GCS Way” is displayed in the diagram on the right. It’s arranged as a yardstick of the global community consisting of everybody involved in services for Yanmar products, not just Yanmar’s employees around the world but also exclusive agents and retail stores, among others. The basic value is “No down-time service.” GCS holds a “Global Meeting” twice a year that gathers together people responsible for customer-service departments in each country. We are attempting such projects as well as sharing the information.

*The opening of the Kobe Center, a hub for the global supply of parts*

This facility, which embodies “The GCS Way,” was launched in April 2008 on Kobe’s Port Island. Its official name is Kobe Center, Yanmar Logistics Service Co., Ltd. (simply called Kobe Center in following references). Prior to the launch, GCS spent two years and 1.3 billion yen for the development of a uniform-management system of global parts.

Kobe Center is a hub supporting the uniform-management system from the hardware side, while at the same time fulfilling the role of coordinator of Yanmar’s global warehouse.

Masafumi Yoshino, who was the boss behind the planning and development of the uniform-management system, explains the role of Kobe Center:

“For example, the service situation at a branch in France can be ascertained at the head office in Osaka, or if an accident occurs outside of service hours in the United States, parts centers in other countries can respond. This is enabled by the uniform-management system. GCS collects information from local subsidiaries overseas and bases throughout Japan and analyzes to determine the most efficient inventory situation at each of them.”

Based on the outcome, parts are sent and delivered to depots in Japan or overseas by Kobe Center. We’ve realized a system here that fulfills customer focus on offering uniform and globally common services so that our customers will not be hindered.

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**Mission**

Enhance the Yanmar brand image through improved customer services

**Vision**

Pursue customer-oriented distribution methods in reference to service, parts, repair and sales

**Value**

No down-time service

**Guiding Principles**

Work from the customer’s perspective, with empathy and a global perspective.

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**3 Services**

- **Parts service**
- **Technology service**
- **Logistics service**

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**Masafumi Yoshino**

Executive Officer, Chief Manager of the Global Customer Service Department

Joined Yanmar Diesel Co., Ltd., in 1980

Manager of Corporate Planning Group and Senior Manager of Corporate Strategy Department

Senior Manager of Sales Planning Department in Sales Corporate Department of Yanmar Co., Ltd., in 2004, then held consecutive posts in Sales Planning, including Senior Manager of the Planning Department in 2005.

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Manager of Corporate Planning Group and Senior Manager of Corporate Planning Department, Senior Manager of Sales Planning Department in Sales Corporate Department of Yanmar (Co., Ltd.) in 2004, then held consecutive posts in sales planning, including Senior Manager of the Planning Department in 2003. He has held his current post since 2006.
Kobe Center is located in a three-story building with total floor space of 15,830 m². Medium-capacity rack locations number 81,336, while heavy-duty pallet racks number 3,382. The center boasts capacity roughly 50% bigger than the Osaka Parts Center, which served as the nucleus of the company’s parts-supply operation for over 40 years.

The center’s leading feature is its receiving and shipping lines. Using semiautomatic carrier machines, one line is for domestic shipments, and five for overseas shipments, and acceptance inspection and packing can be carried out smoothly.

“ar for the new center, we studied whether to go with hi-tech from the start, and then made the bold decision to use semiautomatic methods,” Mr. Yoshino explains. “If we went ahead with a fully automated computer-control system, it could have ended up causing problems for our customers by failing to pick up parts in the event of power outages or equipment faults. Our philosophy is "no down-time service," and in the end we settled on a concept that enables people to take proper backup procedures.”

A special feature of Kobe Center is its various environment-friendly aspects. Gas heat pumps, which use less energy and emit lower levels of CO₂ than electricity, are used in the air-conditioning system. In consideration of the neighboring community and scenery, the buildings’ heights were kept to no higher than three-stories, while 10% of the factory site is greened. Also, to deal with the characteristics of the land on Port Island, which is prone to subsidence, the land and buildings are made to sink simultaneously, while a foundation is used that exerts no influence of the subsidence on the equipment. The lighting system inside the warehouse is sensitive to human perception and highly energy-efficient. Even during an eight-hour working shift, the lights are actually on for 4.7 hours, attaining a 40% cut. Regarding the working environment, barrier-free facilities have been introduced in such places as the parking areas, washrooms, and second-floor offices.

Kobe Center Outline

Name: Yanmar Logistics Service Co., Ltd, Kobe Center
Location: 3-5-2 Minatojima, Chuo-ku, Kobe City, Japan
Site area: 20,518 m²
Building area: 8,450 m²
Total floor space: 15,830 m²
Aggregate investment: ¥3.67 billion
Main business activities: Storage and shipment of parts for overseas assembly and manufacturing of engine parts

Yanmar’s customer services employ the two wheels of "IT" and "the human connection"

There are generally two types of customer services, according to the GCS view. One is the expert use of IT. The other is the "human connection" that listens to the voices of our customers, face-to-face. In the past, when the unified-management system was created, GCS’s IT network was almost in place. Now, from this year, GCS is launching Yanmar’s own independent "GYODKRK" system.

"Goyokiki" is a Japanese word that refers to a custom from the Edo Period of tradesmen going door to door to visit their customers. In today’s world, however, customers’ faces are often never seen, due to such modern IT-based factors as communication by e-mail. So now it is common for service representatives not to know what to do in order to go out to meet their customers. Conversely, customers often complain that service people pay uninvited visits. Yet the current GYODKRK system empowers IT plus the human connection. While displaying data on a personal computer, the service representative can explain how support technology was conducted in the past and how now we seem to be approaching an era when such problems no longer occur.

"In the future, as the practical application of IT and GYODKRK make global inroads, at the same time we want to do more of our thinking from the aspect of customer focus," Mr. Yoshino says enthusiastically.

"The target of our services is the exclusive agents who are directly connected to the customer, and the people at sales locations. How are the customers’ voices, which are being heard by these people, being taken in? We’ve managed to have a network between local subsidiaries and sales locations. However, we want to have a speedier transmission of information reaching the head office to know what’s really taking place or what kind of demands our customers have and what should be done. This means ‘making information seamless.’ Yanmar products reach our end customers after being subjected to many different processes. But we consider only the information being seamless.”

Yanmar’s products cover a wide range, and its customers are a diverse group of people. However, there is one thing they have all in common – the “Yanmar brand.” GCS is striving every day to deliver greater satisfaction to its customers around the world as part of its mission to “improving customer services to enhance the Yanmar brand.”
Facilities and equipment that opt for a semiautomatic approach and environment friendliness

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With the aim of gaining the trust of all our stakeholders, Yanmar is engaged in the creation of an environmentally sustainable society.

Administrative Organization
We are pressing ahead with our CSR management while bolstering our corporate-governance system to ensure our future growth as a trusted and reliable corporation.

Relationship with Our Customers
Placing great importance on the bonds of trust we have established with our customers around the world, we aim to create value that is meaningful to both our company and our customers as we strive to achieve original quality assurance and universal design.

Relationship with Our Distributors and Dealers
We aim for the sharing of information concerning our products and business attitude with distributors and dealers in overseas and domestic markets. With this in mind, we are constructing an elaborate network with the goal of making us the world’s No. 1 in customer satisfaction.

Relationship with Our Suppliers
By creating partnerships with business associates who are motivated about environmental preservation in countries around the world, we are able to promote “Green Procurement”, an environmentally conscious system of procurement.

Relationship with Our Employees
Placing importance on the individuality and originality of each individual, we strive to foster personnel capable of working on the global stage, while also providing support in a variety of ways that respect diversity.

Relationship with Society
Aiming to move forward together with the regions and societies we serve, we work to make contributions to societies and regions in Japan and abroad. These efforts include the revitalization of agriculture, support for education and sports, and charitable contributions.

Relationship with the Environment
Taking “Symbiosis with Nature” as our corporate theme, we are placing greater effort in the development of environment-oriented products, environmental preservation in our manufacturing processes, and “environmental communication” activities.
With the aim of gaining the trust of all our stakeholders, Yanmar is engaged in the creation of an environmentally sustainable society.

**Administrative Organization**
We are pressing ahead with our CSR management while bolstering our corporate-governance system to ensure our future growth as a trusted and reliable corporation.  

**Relationship with Our Customers**
Placing great importance on the bonds of trust we have established with our customers around the world, we aim to create value that is meaningful to both our company and our customers as we strive to achieve original quality assurance and universal design.

**Relationship with Our Distributors and Dealers**
We aim for the sharing of information concerning our products and business attitude with distributors and dealers in overseas and domestic markets. With this in mind, we are constructing an elaborate network with the goal of making us the world’s No. 1 in customer satisfaction.

**Relationship with Our Suppliers**
By creating partnerships with business associates who are motivated about environmental preservation in countries around the world, we are able to promote “Green Procurement”, an environmentally conscious system of procurement.

**Relationship with Our Employees**
Placing importance on the individuality and originality of each individual, we strive to foster personnel capable of working on the global stage, while also providing support in a variety of ways that respect diversity.

**Relationship with Society**
Aiming to move forward together with the regions and societies we serve, we work to make contributions to societies and regions in Japan and abroad. These efforts include the revitalization of agriculture, support for education and sports, and charitable contributions.

**Relationship with the Environment**
Taking “Symbiosis with Nature” as our corporate theme, we are placing greater effort in the development of environment-oriented products, environmental preservation in our manufacturing processes, and “environmental communication” activities.
Yanmar resolves the fundamental policy on the Administrative Organization

Yanmar promotes CSR management in order to remain a corporation trusted by society.

Major Activities

1. Utilization of the Risk Event Report Database

Yanmar has utilized the Risk Event Report Database since August 2008. Any reports on unexpected events and business risks are submitted by business units, and risk management officers put it on record in the Database for sharing with the top management. There were 17 events entered in the Database in 2008.

2. Risk assessment for the Yanmar Group's major plants

External specialists test our major plants to check their capabilities to resist accidents and disasters so as to improve current risk countermeasures. In 2008, nine plants underwent such field surveys.

3. Emergency communication network and communication test

Yanmar introduced a safety confirmation system in January 2009 and conducting general drills for the entire Group in January and September every year. In 2008, we established an emergency communication network that enables swift transmission of danger information from each facility in the Group on no-work days, and conducted a communication test every two months.

Promotion of CSR Activities

In March 2008, we set up the Corporate Social Responsibility Dept. as an organization dedicated to the further promotion of CSR activities in the Yanmar Group. Composed of the Intellectual Property Dept., Legal & Ethics Group, Environmental Management Dept., and Planning Group, the Corporate Social Responsibility Dept. is actively implementing cross-sectoral measures in order to incorporate the varying requests of stakeholders into business operations.

Organizational chart for CSR promotion

Corporate Governance System

Yanmar has put in place a corporate governance system that realizes quick decision-making and clearly defined responsibilities, with the aim of improving stable corporate value over the long term.

As our administrative organization, in 2000 we introduced an executive officer system to promote separation between administrative supervision and the execution of duties. Since then, the Board of Directors has specialized in the determination of duty execution and supervision of execution. Yanmar has 16 directors as of March 20, 2009, and the Articles of Incorporation stipulates that there should be no more than 20 directors.

Under the Board of Directors are three management committees: the Management Strategy Committee (in charge of actual decision-making for the entire Yanmar Group), the Business Execution Committee (in charge of PDCA management for business execution), and the Monthly Business Review Committee (in charge of the monthly progress management of business execution), which serve to enhance the executive power of the corporation.

Yanmar turns to two external auditors out of four members, whose job is to monitor managerial operations, to reinforce the check-and-balance capability and deterrent capability with respect to duties, thereby enhancing the transparency of our corporate conduct. Each auditor conducts auditing in line with the policies and audit programs determined by the Board of Auditors.

Internal Control

Yanmar resolves the fundamental policy on the internal control system at the Board of Directors and is establishing an appropriate internal control system in order to ensure the appropriate execution of businesses in compliance with the Corporate Act. To be specific, Yanmar has determined basic policies concerning the formation of an internal control system at the Board of Directors as follows:

- Basic Policies for Formation of the Internal Control System (outline)
  - Promoting development and implementation of internal compliance systems based on the compliance regulations;
  - Establishing a management system for appropriate implementation of businesses by the entire Group;
  - When a critical decision is to be made, a serious management condition occurs, or material damage or loss of trust is likely, Directors or employees should immediately notify the auditors if they find any violation of law or material act of tort. Corporate Auditors may request that a report be made at any time.

In addition to the above, the Basic Policies also deal with appropriate risk management policies, information establishment and improvement of management system, and independence of controllers to auditors.

Compliance Promotion System

Group Compliance Committee

The Yanmar Group set up the Group Compliance Committee with the Executive Vice President as the head and representatives of each business company and operation division as members plus external members (lawyers). The purpose of the Committee is to have the top management as well as all Group employees fully understand the corporate ethics and the importance of legal compliance, and to establish and maintain a system that prevents any conduct in violation of social ethics and laws and regulations. The Committee has in place the Yanmar Code of Conducts and formulates compliance policies for the entire Group based on the Code. Each Group company stipulates its own compliance promotion plan based on the Group-wide policies and carries out compliance programs.

Promotion Activities

- Full check of compliance risks
  - A Group-wide full check of compliance risks was conducted from July to November 2008.

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Under the Board of Directors are three management committees: the Management Strategy Committee (in charge of strategic planning), the Administrative Organization Committee (in charge of the monthly progress management of business execution), which serves to enhance the executive power of administration.

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In addition to the above, the Basic Policies also deal with appropriate storage and management of information, establishment and improvement of management system, and independence of assistants to auditors.

Compliance Promotion System

**Group Compliance Committee**

The Yanmar Group set up the Group Compliance Committee (with the Executive Vice President as the head and representatives of each business company and operation division as members plus external members—lawyers)—the purpose of the Committee is to have the top management as well as all Group employees fully understand the corporate ethics and the importance of legal compliance, and to establish and maintain a system that prevents any conduct in violation of social ethics and laws and regulations. The Committee has in place the Yanmar Code of Conducts and formulates compliance policies for the entire Group based on the Code. Each Group company stipulates its own compliance promotion plan based on the Group-wide policies and carries out compliance programs.

- **Compliance Promotion Activities**
  
  - Full check of compliance risks: A Group-wide full check of compliance risks was conducted from July to November 2008.
  - **Promotion Activities**

Major Activities

- **Utilization of the Risk Event Report Database**
  
  Yanmar utilized the Risk Event Report Database from August 2006 and established the Group Risk Management Committee (with the Executive Vice President as the head and representatives of each business company and operation division as members) in April 2007. The Committee, designed to ensure accurate management and practices against varying risks affecting our business, has been assigned the tasks of reviewing Group-wide policies and directions, addressing issues and responses related to risk management promotion, and confirming the decisions made.

- **Acquisition of Pledges of Compliance**
  
  Pledges of Compliance were acquired from Group employees and executives except for overseas companies. As of the end of March 2009, 98% of staff members have submitted pledges.

- **Establishment of a system for overseas**
  
  In November 2008, internal compliance officers of overseas companies were invited to Japan to hold an Overseas Subcommittee. The condition and status of their promotion activities were confirmed by the Subcommittee.

- **Internal education activities**
  
  The “Risk (Ethics)” in English News is issued on the Internet biweekly. In October 2008, posters were created in order to improve employees’ recognition of internal reporting system.

- **Internal Reporting System "Complaint Box for Ethics"**
  
  Yanmar has in place a “Complaint Box for Ethics,” which allows employees to notify or consult when they have learned of or have doubts about any inappropriate, unlawful, illegal or unethical conduct at workplaces or during business activities. The Secretariat receives these notifications by phone, fax, e-mail or in personal consultations, and the Compliance Committee addresses problems in order to develop solutions. In 2008, the number of notifications to the Complaint Box for Ethics increased from 7 in the previous year to 22 as a result of wider recognition through poster advertising of the internal reporting system.

- **Group Companies Establishing their Compliance Committees**
  
  Business companies and operation divisions also establish their own Compliance Committees as subordinate organizations of the Group Compliance Committee and formulate their own compliance policies. The purpose is to expose dormant, hidden but present compliance problems and take measures to avoid their recurrences as preventive actions.

Risk Management Promotion

The Yanmar Group set up a section dedicated to risk management in August 2006 and established the Group Risk Management Committee (with the Executive Vice President as the head and representatives of each business company and operation division as members) in April 2007. The Committee, designed to ensure accurate management and practices against varying risks affecting our business, has been assigned the tasks of reviewing Group-wide policies and directions, addressing issues and responses related to risk management promotion, and confirming the decisions made.

- **Promotion of the Group’s Compliance and consultations on related legal affairs (response to lawsuits)**

- **Environmental Management Dept.**
  
  Promotion of Group activities including responses to environmental authorities. Implementation of CSR promotional activities and establishment of the Group's compliance system.
Quality is the “bond of trust with customers.” True to this motto, we strive to reinforce our partnership with customers.

Efforts to Improve Quality

The Yanmar Group regards “quality” as a bond of trust with customers. Each employee continuously strives to earn the trust of customers by providing products with the industry’s top level of quality and performance, and by offering prompt, suitable services. In 1968, we were the engine industry’s first winner of the Daiming Application Prize, the greatest honor bestowed for the pursuit of quality control, and since that time, all of our employees have been striving to achieve quality improvements and product safety through the ongoing promotion of TQM and QC circle activities.

Our Quality Assurance System

Yanmar’s Quality Assurance System is a holistic system that integrates the management of the whole business from design, development, production, sales, and service. The system is designed to ensure product quality and safety throughout the entire life cycle of the product, from the planning and development of products, production, sales, and service, to the disposal of products. The entire group is monitored for quality assurance by the group-wide Quality Assurance Committee. We have also obtained ISO 9001 certification at 28 units, including some overseas.

Quality Assurance and Product Safety Activities

We are conducting systematic activities to ensure product quality and safety at every stage of our business activities, including the planning, development, production, sales, and service of our products. At the development and design stage, we incorporate market needs and customer requirements into design quality through GFQ (quality function development) and predict and identify potential problems in the life cycle of each product through PMEA (failure mode effect analysis).

Product safety is particularly important. In addition to compliance with all applicable standards and regulations both domestically and internationally, we have a stricter set of in-house standards in place. We also conduct continuous design reviews as well as risk assessments, and hold evaluation meetings at each step of new product development. With this system, new products must undergo assessment from the viewpoints of both quality and safety before being put into mass production. At the production stage, quality and safety are indispensable factors in each process. Our quality management system is constantly being improved through QC circle and ISO 9001 activities.

Universal Design

Agricultural machinery is characterized by the following uniquenesses in use, which are not seen in automobiles or construction machinery, because of where and how they are used:

1) Since users carry out farming while moving, they are required to carry out two kinds of operations, i.e. “moving” and “farming,” at the same time.
2) Agricultural machines are used in severe working environments such as steeply sloped semi-mountainous areas or muddy paddy fields.
3) Farmers carry out different kinds of work, i.e. tilling, puddling, rice planting, and yielding, according to the season and over short time periods, and use different kinds of machines. By the time a farmer feels he has become used to using one machine, the work for which the machine is used is over, and the farmer won’t use it again until the following year. This makes it more difficult for farmers to learn how to operate each machine, more effectively.
4) Farmers, who are users of agricultural machinery, are aging every year, which is causing a widening gap in physical capability among users.

Incorporating the Concept of Universal Design into our Products is Our Solution to Refinement of “Standing in the User’s Shoes”

Yanmar displayed the Combine harvester AJ218 in the Japan Universal Design Experience Pavilion, which introduced advanced cases of universal design in Japan, at the Taiwan Design Exhibition 2008 held in Tainan from October 4 to 19 in 2008. A large number of people showed an interest in the AJ218, which features various universal design elements, including a wing lever that meets the two demands of viewability and ease of use, and an operation panel designed to be easy to look at. Many visitors actually rode on the combine harvester to touch and feel the JD features of the machine. About 360,000 people visited the Exhibition during the period, many of whom visited the Japan UD Experience Pavilion and saw Yanmar’s products.

A presentation, Yanmar’s Universal Design Promotion, was held as one of Japan’s advanced case examples of UD in the Taiwan UD Seminar held during the Exhibition period. The Expo and seminar provided a good opportunity for Yanmar to connect with visitors, and Yanmar came to firmly believe that UD, which embodies the concept of standing in the user’s shoes, is understood by people around the world, despite linguistic barriers and regardless of the type of product.
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Quality Assurance and Product Safety Activities
We are conducting systematic activities to ensure product quality and safety at every stage of our business activities, including the planning, development, production, sales and service of our products. At the development and design stage, we incorporate market needs and customer requirements into design quality through QFD (quality function development) and predict and identify potential problems in the life cycle of each product through FMEA (failure mode effect analysis).

Our Quality Assurance System
Yanmar is engaged in quality assurance activities in all stages of business activities, ranging from the planning and development of products to production, sales and service, with the quality assurance department of each business unit serving as the general contact. Every business unit has a Product Safety Committee in place to ensure product safety. The entire group is being monitored for quality assurance by the group-wide Quality Assurance Committee. We have also obtained ISO 9001 certification at 28 units, including some overseas.

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4) Farmers, who are users of agricultural machinery, are aging every year, which is causing a widening gap in physical capability among users.

Quality of products and services, therefore, is also important in addition to agricultural machinery and energy systems.

Examples of UD in the Taiwan Design Exposition 2008
At the Taiwan Design Exposition during the period, many of whom visited the Taiwan UD Experience Pavilion and saw Yanmar’s products.

A presentation, Yanmar’s Universal Design Promotion, was held as one of Japan’s advanced case examples of UD in the Taiwan UD Seminar held during the Exposition period. The Expo and seminar provided a good opportunity for Yanmar to connect with visitors, and Yanmar came to firmly believe that UD, which embodies the concept of standing in the user’s shoes, is understood by people around the world despite linguistic barriers and regardless of the type of product.

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** This award is given to enterprises that have achieved distinctive improvements in product quality through the application of TPM in a designated year. The Yanmar Group has undergone systematic activities to ensure product quality and safety at every stage of our business activities, including the planning, development, production, sales and service of our products. At the development and design stage, we incorporate market needs and customer requirements into design quality through QFD (quality function development) and predict and identify potential problems in the life cycle of each product through FMEA (failure mode effect analysis).

** A systematic activity that conducts effective and efficient operation of all of the organizations of a company, and contributes to the achievement of the company’s longer-term goals and specifies management systems, and services can be provided at the right time and at the right price. Also referred to as a "general quality commitments."
We put a lot of importance in communication with our customers, so that you can use our products with a sense of security.

Response to and Support of Customers

Communication with our customers is very important for Yanmar as we strive to help our customers use our products safely and appropriately. We quickly and accurately respond to customer complaints, opinions and requests in order to improve customer satisfaction.

- Responses to Customer Inquiries
  In Japan, we have established a Customer Consultation Office that responds to telephone inquiries from customers. Customers can also send their opinions and requests by e-mail from our website.

- E-mail inquiries (FY2008)
  • E-mail inquiries: 7,396
  • 10% of 16,500 customers used e-mail inquiries
  • 90% of 16,500 customers are satisfied with the e-mail inquiries service

Enhanced Response to Recall

In case an unexpected problem arises affecting products purchased by customers and action is judged necessary, Yanmar will swiftly implement appropriate actions, including the recovery, repair, inspection or replacement of products with customer safety and damage prevention as top priorities. In case of a recall, we will notify the relevant organizations and disclose this information in recall notices in newspapers and on our website to ensure our compliance with the recall rules.

Holding of the Yanmar Convention

The Yanmar Group holds the Yanmar Convention every year to encourage efforts to share ideas, directions and product information with dealers throughout the country and reinforce relationships of trust with them.

The Yanmar Construction Equipment Convention was held at Marine Messe Fukuoka, Fukuoka city, on July 9, 2008, and 450 participants, mainly rental contractors, attended the convention from 19 countries. The Yanmar Agricultural Equipment National Convention was held at Kobe Portopia Hotel, Kobe city, on January 19, 2009. The first part was a presentation of the new company Yanmar Agricultural Equipment Sale Co., Ltd. established by merging 10 sales companies in December 2008, and in the second part, with the upcoming merger with Yanmar (Feb. 21), the participants viewed to achieve further “evolution” under the slogan “Let’s combine all the forces of the Group and advance even further with Yanmar always being the customer’s choice”.

Communication with Overseas Agents

Yanmar Group holds product exhibitions in various parts of the world every year to allow as many people as possible to get to know our products and boost ties with dealers. Distributor and Dealer Conventions are also held to promote the introduction of new products and the exchange of notes among participants in order to vitalize communication among dealers.

The 12th China International Agricultural Machinery Exhibition with Over 100,000 Visitors Every Day

Akihiro Katayama
Planning Group, Domestic Sales Management Dept.
Yanmar Marine System Co., Ltd.

The Yanmar Marine National Convention 2008 was held at Hotel New Otani Osaka on October 1, 2008. Under the slogan of “Establishment of a customer-oriented business system”, Yanmar Marine System’s sales offices and dealers were presented. All participants in the Convention renewed their commitment.

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During the Convention, the new ECCB engine model was also introduced. Other new boat models including the Hunt24 were shown at the Yanmar New Boat Presentation held at the New Nishinomiya Yacht Harbor on the 2nd and 3rd of October.

Yanmar Marine System is determined to continue providing our customers with products and services that satisfy them.

We have established a firm relationship of trust with suppliers and dealers around the world.
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  - **E-mail inquiries**
    - (FY2008)

- **After-sales Service**

  Annual nationwide customer questionnaire surveys are used to obtain information about our stores, sales activities, services and products from customers selected from random sampling. For agricultural machinery, customer satisfaction surveys are implemented with regard to products launched each year, and the 2008 survey was conducted for one machine. Guarantees that include checksheets for free inspections are issued for some products as part of our after-sales service improvement policy.

**The Swift and Accurate Provision of Product Safety Information**

Regulations for product safety have recently been reinforced as a result of, for example, revision of the Consumer Product Safety Act. In response, Yanmar has improved various internal systems for compliance with product safety regulations, including enhancement of the Yanmar Technical Information System (YTS-eclaim). This gathers technical information by means of the web and the internet, and established the Customer Consultation Office. In addition, we actively provide the relevant authorities with information on accidents.

- **YTS-eclaim: overseas warranty handling system**
- **Ministry of Land, Infrastructure, Transport and Tourism:** Ministry of Economy, Trade and Industry, Ministry of Agriculture, Forestry and Fisheries, etc.

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**Yanmar Marine National Convention**

Akihiro Katayama
Planning Group, Domestic Sales Management Dept.
Yanmar Marine System Co., Ltd.

The Yanmar Marine National Convention 2008 was held at Hotel New Otani Osaka on October 1, 2008. Under the slogan of “Establishment of a customer-oriented business model," specific examples of “proposa-type business models" employed by Yanmar Marine System’s sales offices and dealers were presented. All participants in the Convention renewed their commitment.

During the Convention, the new 6CXB engine model was also introduced. Other new boat models including the Hunt24 were shown at the Yanmar New Boat Presentation held at the New Nishinomiya Yacht Harbor on the 2nd and 3rd of October. Yanmar Marine System is determined to continue providing our customers with products and services that satisfy them.

**Important News on Quality**

http://www.yanmar.co.jp/quality/qualityen.htm

**Number of recalls**

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of recalls</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>8</td>
</tr>
<tr>
<td>2005</td>
<td>6</td>
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<tr>
<td>2006</td>
<td>8</td>
</tr>
<tr>
<td>2007</td>
<td>3</td>
</tr>
<tr>
<td>2008</td>
<td>2</td>
</tr>
</tbody>
</table>

**MLIT Recall and Improvement Measures, product recalls based on the Consumer Product Safety Act, and the number of recalls notified to the EPA.**

**The 12th China International Agricultural Machinery Exhibition with Over 100,000 Visitors Every Day**

Hua Min
Manager, Sales Dept.
Yanmar Agricultural Equipment (China) Co., Ltd.

The 12th China International Agricultural Machinery Exhibition was held on October 26 and 27, 2008. 1,816 companies in and outside China participated in the Exhibition, and over 100,000 people visited the venue daily, which reaffirmed the current and future potential for growth of the Chinese market of agricultural machinery.

Tractors, diesel engines, power generators, rice and wheat harvesters, paddy rice transplanters, and vegetable harvesters were on display throughout an impressive area of 135,000 m². Among these, the Ee60 combine for two-lane harvesting and designed particularly for use in mountainous areas drew much attention. Some 800 units have been sold in China since its launch in 2006.
Yanmar Communicates with Suppliers in and outside Japan in Various Ways to Deepen Mutual Understanding.

Fundamental Purchase Policy

The Yanmar Group pursues thorough compliance with “value, quality and delivery time,” the basic functions of procurement service, on a global level and with strategic group-wide purchasing. We also collaborate with suppliers in environmental conservation efforts and other activities in order to meet social needs from a long-term standpoint.

Reinforcement of Partnership
- From a long-term perspective, we promote the deepening of mutual understanding and trust with suppliers.

Stable Supply
- We avoid suppliers in terms of equipment capability, personnel reinforcement, productivity improvement and support in the event of a business failure. We provide necessary instructions concerning those matters, and promote partnerships with suppliers to ensure the stable acquisition and timely delivery of materials and parts from our suppliers.

Quality Assurance
- We aim to ensure the appropriate quality of parts delivered by suppliers by taking various actions.

Cost Reduction
- We set quality targets and target cost reduction with this in mind.

Legal Compliance
- We comply with social norms, laws, regulations, and our spirit and ethics in order to ensure thorough compliance with security protection.

Purchase Policy Briefing

One of these ways is a Purchase Policy Briefing session held every year for our major suppliers at the beginning of the year in seven locations in Japan to explain the policies for the entire year and for the mid-term. In February 2009, based on the prediction that the present severe market conditions would last at least for two more years, two-year cost reduction targets were determined. We will ask the entire Group to fulfill these targets. Suppliers are encouraged to propose various ideas for cost reductions and help us together make a difference in terms of improvements of product functions, sharing of parts, and enhancements of productivity.

Supporting Suppliers’ Effort for Improvement

The Procurement Dept. of the Yanmar Group selects certain of our domestic and overseas suppliers from the viewpoints of value, quality and delivery time every year and provides instructions for improvement.

Since 2007, we have been promoting YWKS activities to enhance the constitutional improvement of suppliers and reinforce partnerships with them. In 2008, 19 suppliers were invited to participate in these activities to make efforts for “quality improvement,” “productivity enhancement,” and “inventory reductions.”

YWKS stands for Yanmar Way by Kaizen with Suppliers, which is an extended version of the NEK activities to include suppliers. The Yanmar Way by Kaizen activities are ongoing improvement activities conducted by the Yanmar Group, specifically aimed at further reducing value and related lead time and productivity of internal work and external vendors.

Green Procurement

Reinforcing the Green Procurement System

Since the establishment of the Yanmar Green Procurement Guideline in April 2003 (revised in December 2006), we have been promoting the procurement of safe parts and components designed and produced in an environmentally-friendly way while collaborating with our suppliers at various parts of the world.

In November 2006, we formulated the Regulatons of Restrictions of Use for Environmental Hazardous Substances to identify substances which we should voluntarily refrain from using.

In selecting suppliers, we prioritize transactions with suppliers enthusiastic about environmental conservation activities with an established environmental management system in addition to such evaluation items as value, price and delivery time. With the Procurement Dept. of the head office as the main player, we hold briefings or sessions to the management of all suppliers to request their cooperation with a green procurement survey and green procurement.

Survey for Parts and Materials

We check materials and parts provided by suppliers for substances banned by our guidelines.

In 2008, we started providing chemical substance content information from suppliers into a database to establish the Product Content Chemical Substance Management System for the integrated management of these substances. We promote the internal disclosure of information on chemical substances contained in Yanmar products.

Green Procurement Guideline:
http://www.yanmar.co.jp/aboutus/law/green_01.htm

Human Resources Vision

In order for Yanmar to survive amid competition on a global scale, we need to “strengthen” not only our products but also our organization and individual employees. Based on this understanding, we formulated visions from the viewpoint of organization and personnel and apply these to actual management.

The Vision for Personnel (Acquisition and Fostering of Human Resources)

(1) We have professional human resources capable of working on a global scale, regardless of nationality, gender or age.

(2) We operate a career development program that can swiftly foster human resources for future management positions.

(3) We promote personnel exchange in the Yanmar Group, including overseas, in order to make effective use of the group personnel.

(4) We have in place a system that allows us to respect the plans, desires, and intentions of each individual employee in terms of personal development and assignments.

The Vision for Mechanism (Personnel and Treatment System)

(1) We fairly evaluate the achievements of individuals and the company and accordingly allocate the results.

(2) We have a system in place that allows high-achieving employees to enjoy above-normal compensation.

(3) Long-term employment is the basic pattern of employment in principle, and measures are available that help each employee lead a career life that matches his/her respective lifestyle.

The Vision for Organization and Functions (Organizational System and Business Operations)

(1) We have an organizational system based on mission management, to ensure that all awareness of the target direction of each business by all employees, and have clearly defined the spirit and ethics for all employees based on each mission.

(2) We have a simple and efficient chain of command in place, constant appropriate delegation of authority, and can engage in swift decision-making.

(3) We have clearly defined core operations in each division in order to ensure the implementation of business operations with a small core organization and a small group. Non-core operations are actively outsourced.

Global Talent Development

When a company faces ongoing challenges in terms of operation and management, the lack of concentration on human resources development directly results in the loss of power for evolution. Now, when the entire Group is seen from a global viewpoint, we realize the increasing demand for personnel. To meet such demand, we intend to provide fair learning opportunities and appropriate educational environments in all business fields including overseas companies, and impart the capabilities of an innovative mindset to each employee. We support the Group-wide structure for capability development in order to foster personnel who are eager to take on all challenges and play important roles in global businesses. We provide education and training to our employees to help them become better persons with wide frames of reference, by providing training on fundamental skills and imparting business knowledge and know-how so as to ultimately manufacture manufacturing capabilities.

Development of Human Resources Capable of Standing on Their Own with Customers’ Viewpoints Always in Mind

We are engaged in the development of human resources who can motivate themselves to enhance their capabilities as well as help their customers solve problems in order to achieve successful results. We provide various opportunities for capability development such as “engineer (basic) education,” “selective workshops (Challenge Seminars)” and “correspondence education,” particularly to those employees who are determined to learn by themselves and “want to enhance their capabilities and performance for greater contributions to customers.”

Nurturing of Human Resources Active in Global Businesses

To promote the “globalization” of our personnel, we emphasize specialized training, such as that designed to improve practical English capabilities centering on conversation skills and international business skill training (“English business writing class” or “training for presentations and negotiations in English”). We also continue to reinforce our training programs for employees assigned to overseas branches and sites (such as the Group’s business division and its overseas risk management training), and support our employees stationed in foreign countries to help them become swiftly adapt to working and living in foreign countries.

We are continuously committed to strengthening our education and training for global players.

Development of Human Resources for Future Managerial Positions

We provide learning opportunities for improvement of management capabilities such as the Yanmar Management School to help our employees who are destined to play pivotal roles in management positions in the future. To further help them serve as global leaders, we support capability development such as communication with and leadership for foreign employees. We will increase learning opportunities to help employees acquire in-depth knowledge on management from a global viewpoint.
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The Yanmar Group pursues thorough compliance with “value, quality and delivery time,” the basic functions of procurement service, on a global level and with strategic group-wide purchasing. We also collaborate with suppliers in environmental conservation efforts and other activities in order to meet social needs from a long-term standpoint.

- Reinforcement of Partnership
  From a long-term perspective, we promote the deepening of mutual understanding and trust with suppliers.

- Stable Supply
  We audit suppliers in terms of equipment capability, personnel reinforcement, productivity improvement and supply reliability based on the necessary instructions concerning those matters, and promote partnerships with suppliers to ensure the stable acquisition and timely delivery of materials and parts from domestic and overseas suppliers.

- Quality Assurance
  We aim to ensure the appropriate quality of parts delivered by suppliers by taking various actions including quality audits and guidance to suppliers, a quality committee, the initial stable management of new products, and implementation of the Quality Priority Management System and Quality Control Excellent Plant Certification System.

- Cost Reduction
  We set up cost targets and target cost reduction with this in mind.

- Legal Compliance
  We comply with social norms, laws, regulations, and their spirit and ensure thorough compliance with security protection.

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One of these ways is a Purchase Policy Briefing session held every year for our major suppliers at the beginning of the year at seven locations in Japan to explain the policies for the entire year and for the mid-term. In February 2009, based on the prediction that the present severe market conditions would last at least for two more years, two-year cost reduction targets were determined. We will continue to pursue these targets.

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YWKS stands for Yanmar Way by Kaizen with Suppliers, which is an extended version of ISO 9001 activities to include suppliers. YWKS activities are ongoing improvement activities conducted by the Yanmar Group on a specifically invited basis to reduce defect rate and achieve lead time and productivity cost reduction and enhancement of “17 plants in Japan.”

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Since the establishment of the Yanmar Green Procurement Guideline in April 2003 (revised in December 2008), we have been promoting the procurement of safe parts and components designed and produced in an environmentally-friendly way while collaborating with our suppliers at various parts of the world. In November 2006, we formulated the Regulations on Restrictions of Use for Environmental-Hazardous Substances to identify substances which we should voluntarily refrain from using.

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  (1) We have professional human resources capable of working on a global scale; regardless of nationality, gender or age.
  (2) We operate a career development program that can swiftly foster human resources for future management positions.
  (3) We promote personnel exchange in the Yanmar Group, including overseas, in order to make effective use of the group personnel.
  (4) We have in place a system that allows us to respect the place, desires and intentions of each individual employee in terms of personnel development and assignments.

- The Vision for Mechanism (Personnel and Treatment System)
  (1) We fairly evaluate the achievements of individuals and the company and accordingly allocate the rewards.
  (2) We have a system in place that allows high-achieving employees to enjoy above-level compensation.
  (3) Long-term employment is the basic pattern of employment in principle, and measures are available that help each employee lead a career life that matches his/her respective lifestyle.

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  (1) We have an organizational system based on mission management, to ensure full awareness of the target direction of each business by all employees, and have clearly defined the spirit and morale for all employees based on each mission.
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Flexible Systems Available for Respect for Employee Diversity.

We are taking various actions to ensure the health and safety of our employees.

Listening to the Employees’ Voices

Our company conducts an employee awareness survey as a means of listening to their voices. The way in which employees’ awareness varies over the years is examined in our employee awareness survey. Analysis of the results is used to develop measures to revitalize the organization and workplaces.

Employment of Personnel

Yanmar employs capable people in various ways based on the objective of “acquiring professional personnel who can work globally, regardless of nationality, gender or age.” Two types of employment patterns are used, namely graduate recruitment and mid-career recruitment. In recent years, the emphasis on diversity management that respects individual diversity has encouraged us to hire more foreigners and more women for main career tracks. As of May 20, 2009, Yanmar alone, on a non-consolidated basis, had 3,398 employees, with a male-female employment ratio of 88.3% (3,000) versus 11.7% (398).

- Man-woman employment ratio (as of May 20, 2009) (Yanmar Co., Ltd.)

<table>
<thead>
<tr>
<th>Year</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>2260</td>
<td>117</td>
</tr>
<tr>
<td>2007</td>
<td>2723</td>
<td>191</td>
</tr>
<tr>
<td>2008</td>
<td>3016</td>
<td>215</td>
</tr>
</tbody>
</table>

- Man-woman graduate recruitment ratio for 2008 (Yanmar Co., Ltd.)

<table>
<thead>
<tr>
<th>System</th>
<th>Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>69.3%</td>
</tr>
<tr>
<td>Women</td>
<td>30.7%</td>
</tr>
</tbody>
</table>

Yanmar holds workshops with internal and external lecturers for new employees as well as young and mid-career employees, and makes educational tools available for new employees to create bright working environments where human rights are respected. In addition, we utilize morning meetings and in-house bulletin boards to impart the importance of human rights to employees. In the Shiga Zone, Yanmar is a member of the Shiga Corporations Coordination Meeting on Anti-discrimination and, as a managing member, is actively engaged in educational activities to promote anti-discrimination in other member companies.

Respect for Human Rights

Diversity and Opportunity

- Supporting a Balanced Life between Work and Family
- Mental Healthcare
- Promotion of Employment of the Physically Challenged

Yanmar develops and implements employment environments to help stabilize the careers and family lives of employees who raise children or take care of aged parents by providing a recently revised child nurturing and nursing care system, a female employee development system intended for former women employees who quit due to marriage or childbirth, and more.

Promotion of Employment of the Physically Challenged

As of March 2009, the physically-challenged employment ratio is 1.62% (Yanmar Co., Ltd.), 7 persons short of the statutory level of 1.8%. Therefore, we are making a group-wide effort to attain the statutory physically-challenged employment ratio. Recruitment activities are implemented at employment bureaus as well as in conjunction with graduate recruitment activities, including visits to schools or participation in briefing sessions. After employment, physically-challenged employees have the opportunity for consultations in the third year in the case of graduate recruitment, and the second or third year in the case of mid-career employment, as well as consultations with the newly employed to help them stay with the company.

Reemployment of Older People

An over-60 re-employment scheme for hiring people 60 and older, also has been put in place to promote the propagation of technical expertise and help workers achieve post-retirement stability.

We are taking various actions to ensure the health and safety of our employees.

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Health Management and Promotion Committee

The Health Management and Promotion Committee is formed by the members of the labor union engaged in the health insurance union, personnel and labor affairs sections, General Affairs Dept. of the Power System Operations Division, and General Affairs Dept. of the Large Power Products Operations Division. The Committee consults on and promotes various health-related matters such as periodic medical checks and measures to mitigate “metabolic syndrome.”

Health Control

Yanmar conducts a periodic medical check for all employees every year. We also provide a medical check for adult disease prevention for employees aged 30, 35 and over and 40 as well as optional checks when requested. As a result of these checks, those diagnosed as having metabolic syndrome are qualified to take specific healthcare guidance at their request or by appointment of the company since 2008.

In addition, we focus on the healthcare of overworked employees. For example, hard-working employees whose overtime exceeds 100 hours a month or whose average overtime in three months exceeds 80 hours are qualified to see industrial medical advisors, and are recommended to undergo adult disease checkups as required.

Mental Healthcare

Mental healthcare training is conducted as part of managerial worker training and rank-specific training curriculums (such as newly appointed key job training or upper supervisory job training). We also host a lecture by an industrial medical advisor at the head office once a year. In addition, we provide a variety of information on mental health, including the placement of mental health consultation services on group bulletin boards and references to mental health consultation services, in order to prevent the occurrence of mental diseases.

Labor-Management Relationship

Yanmar maintains a stable relationship with the Yanmar Labor Union and engages in periodic negotiations and discussions on employee working conditions. We also have the opportunities to explain and discuss the financial conditions of the company by holding meetings to explain the corporate condition and other labor-management meetings.

Occupational Health and Safety

The Yanmar Group has an occupational health and safety committee at every production plant to fully ensure the health and safety of workers. Each plant maintains and reinforces their occupational health and safety management by conducting health and safety patrols and other activities under the direction of the Occupational Health and Safety Committee. The status of safety management of each plant is reported to the head office in monthly occupational hazard reports. These reports are used to improve employee awareness and to prevent the recurrence of accidents through measures such as the in-house disclosure of report information and the incorporation of the lessons learned into education and training programs. Since the working environment differs from plant to plant, each plant utilizes its own management system.

- Occupational Hazard Statistics

<table>
<thead>
<tr>
<th>Year</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total of all industries</td>
<td>2.50</td>
<td>2.00</td>
<td>1.95</td>
<td>1.90</td>
</tr>
<tr>
<td>Frequency: Fatalities or injuries per one million working hours</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YANMAR Enviromental &amp; Social Report 2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Flexible Systems Available for Respect for Employee Diversity.

Listening to the Employees’ Voices

We conduct an employee awareness survey as a means of listening to their voices. The way in which employees’ awareness varies over the years is monitored and analyzed in our survey concerning employees and their feelings of happiness or burden against work.*

* “workplace.” “superior” and the “company,” issued once every three to four years via the intranet in a questionnaire format. Analysis of the results is used to develop measures to revitalize the organization and workplaces.

Employment of Personnel

Yanmar employs capable people in various ways based on the objective of “acquiring professional personnel who can work globally, regardless of nationality, gender or age.” Two types of employment patterns are used, namely gradual recruitment and mid-career recruitment. In recent years, the emphasis on diversity management that respects individual diversity has encouraged us to hire more foreigners and more women for main career tracks. As of May 20, 2009, Yanmar alone, on a non-consolidated basis, had 3,336 employees, with a male-female employment ratio of 88.3% (3,000) versus 11.7% (336).

<table>
<thead>
<tr>
<th>Man-woman employment ratio (as of May 20, 2009) (Yanmar Co., Ltd.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
</tr>
<tr>
<td>Men</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Man-woman graduate recruitment ratio for 2008 (Yanmar Co., Ltd.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
</tr>
<tr>
<td>Men</td>
</tr>
</tbody>
</table>

Diversity and Opportunity

- Supporting a Balanced Life between Work and Family

Yanmar develops and improves employment environments to help stabilize the careers and family lives of employees who raise children or take care of aged parents by providing a recently revised child nurturing and nursing care system, a female employee re-employment system intended for former employees who quit due to marriage or childbirth, and more.

- Systems introduced and users (Yanmar Co., Ltd.)(Unit: persons)

<table>
<thead>
<tr>
<th>System</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child-care leave</td>
<td>16</td>
<td>30</td>
<td>37</td>
<td>30</td>
<td>26</td>
</tr>
<tr>
<td>Family-care leave</td>
<td>5</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

- Promotion of Employment of the Physically Challenged

As of March 2009, the physically-challenged employment ratio is 1.62% (Yanmar Co., Ltd.), 7 persons short of the statutory level of 1.6%. Therefore, we are making a group-wide effort to attain the statutory physically-challenged employment ratio. Recruitment activities are implemented at employment bureaus as well as in conjunction with graduate recruitment activities, including visits to schools or participation in briefing sessions. After employment, physically-challenged employees have the opportunity for consultations in the third year in the case of graduate recruitment, and the second or third year in the case of mid-career employment, as well as consultations with the newly employed to help them stay with the company.

- Reemployment of Older People

An over-60 re-employment scheme for hiring people 60 and older, has also been put in place to promote the propagation of technical expertise and help workers achieve post-retirement stability.

<table>
<thead>
<tr>
<th>System</th>
<th>2006</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>79.0%</td>
<td>84.3%</td>
</tr>
<tr>
<td>Women</td>
<td>71.2%</td>
<td>72.7%</td>
</tr>
</tbody>
</table>

Respect for Human Rights

Yanmar holds workshops with internal and external lecturers for new employees as well as younger mid-career employees, sends these young employees to external workshops, and makes educational tools available via internal publications to create bright working environments where human rights are respected. In addition, we utilize morning meetings and in-House bulletin boards to impart the importance of human right to employees. In the Shiga Zone, Yanmar is a member of the Shiga Corporations Coordination Meeting on Anti-discrimination and, as a managing member, is actively engaged in educational activities to promote anti-discrimination in other member companies.

We are taking various actions to ensure the health and safety of our employees.

Promotion of Health Improvement

- Health Management and Promotion Committee

The Health Management and Promotion Committee is formed by the members of the labor union engaged in the health insurance union, personnel and labor affairs sections, General Affairs Dept. of the Power System Operations Division, and General Affairs Dept. of the Large Power Products Operations Division. The Committee consults on and promotes various health-related matters such as periodic medical checks and measures to mitigate “metabolic syndrome.”

- Health Control

Yanmar conducts a periodic medical check for all employees every year. We also provide a medical check for adult disease prevention for employees aged 30, 35 and over 40 as well as optional checks when requested. As a result of these checks, those diagnosed as having metabolic syndrome are qualified to take specific healthcare guidance at their request or by appointment of the company since 2008.

In addition, we focus on the healthcare of overworked employees. For example, hard-working employees whose overtime exceeds 100 hours a month or whose average overtime in three months exceeds 80 hours are qualified to see industrial medical advisors, and are recommended to undergo adult disease checks as required.

- Mental Healthcare

Mental healthcare training is conducted as part of managerial work training and rank-specific training curriculums (such as newly appointed key job training or upper supervisory job training). We also host a lecture by an industrial medical advisor at the head office once a year. In addition, we provide a variety of information on mental health, including the placement of mental health consultation services on group bulletin boards and references to mental health consultation services, in order to prevent the occurrence of mental diseases.

Labor-Management Relationship

Yanmar maintains a stable relationship with the Yanmar Labor Union and engages in periodic negotiations and discussions on employee working conditions. We also have the opportunities to explain and discuss the financial conditions of the company by holding meetings to explain the corporate condition and other labor-management meetings.

Occupational Health and Safety

The Yanmar Group has an occupational health and safety committee at every production plant to fully ensure the health and safety of workers. Each plant maintains and reinforces their occupational health and safety management by conducting health and safety patrols and other activities under the direction of the Occupational Health and Safety Committee. The status of safety management of each plant is reported to the head office in monthly occupational hazard reports. These reports are used to improve employee awareness and to prevent the recurrence of accidents through measures such as the in-house disclosure of report information and the incorporation of the lessons learned into education and training programs. Since the working environment differs from plant to plant, each plant utilizes its own management system.
Yanmar engages itself in various activities to make contributions to our society for the Earth, local communities and children.

Social Contribution Activities

- **The Revitalization of Agriculture**
  - Yanmar Student Essay Contest
  Since 1990, Yanmar has been annually holding the “Student Essay Contest” to create a forum of thinking and discussion with young people concerning the future of agriculture and rural areas. There are many universities that traditionally take on our essay contest as part of their seminar activities or many agricultural colleges that incorporate the essay contest as part of their curriculum. We receive many proposals and recommendations from those young students. For the 19th Student Essay Contest based on the theme of “Agriculture Changes and Agriculture Responses: New Lay the Groundwork for the Future,” “Food that Nurtures Life, Agriculture that Produces Foods, and Farming, Mountain, and Fishing Villages that Protect the Environment,” we had 486 entries, including 115 theses and 370 essays from 81 universities and schools in Japan. The grand-prize winner in the thesis category was Keita Sawaguchi, Graduate School of Kyushu University, who wrote a thesis on “Is the Pan Stronger Than the Snake?” The grand-prize winning essay was “Change of Mind” written by Nanae Yoshimizu, Agricultural Department, Oita Prefectural College of Agriculture.

- **Support for Sports**
  - Supporting the activities of Cerezo Osaka (J League)
  Yanmar supports the activities of the Cerezo Osaka J-League professional soccer team as an operating organization for the team, together with Osaka’s local administrative units and leading companies as part of our effort to help promote sports culture in the local community. Cerezo team members contribute to the growth of athletic activities by holding soccer lessons at local elementary schools, and by participating in events and other types of community interaction.

  - Yanmar supports the Biodiesel Challenge Project, an attempt to drive around the world using biodiesel.

  - Yanmar donates construction machinery to the Biodiesel Challenge Project, an attempt to drive around the world using biodiesel.

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Yanmar engages itself in various activities to make contributions to our society for the Earth, local communities and children.

Social Contribution Activities

- **The Revitalization of Agriculture**
  - **Yanmar Student Essay Contest**
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- **Children's Picture Exhibition**
  Yanmar provides support for a children’s picture exhibition entitled “Courtyard Paddies and Streams” sponsored by the National Federation of Land Improvement Associations (National Mido)i.Net). The 9th exhibition held in 2008 received 12,411 entries, and as a result of a five-day screening process, 22 prize winners, 110 entries and 60 group prize winners were selected. The Yanmar Prize went to a picture drawn by Ayumu Kurokawa, a 6th grader from an elementary school in Chiba Prefecture, titled “Threshing in Terraced Paddy Fields”. Award-winning and selected pieces were on display at the venue of the Midoi Experience Event 2008 held in the underground mall of the Shiodome Shisias, Tokyo, from October 29 to November 3, 2008.

- **Scholarships Granted in 2008**
  - **Scholarships Granted in 2008**
    Scholarship grants were given to students in 2008.

Foundation Activities – Education Support

Yanmar’s first president Magokichi Yamada established the Yamada Education Foundation in 1950 to develop human resources capable of contributing to world peace and prosperity and cultural improvement. Magokichi’s commitment to this project has been passed down through successive generations, and even after 59 years since its establishment, the Foundation still makes scholarship grants and loans available to high school, college and university graduate students as well as foreign exchange students. So far over 5,000 people have received these scholarships and moved on to perform active roles in various fields. In 2008, scholarships were granted to a total of 115 students including 44 graduate students (including 12 foreign exchange students), 44 college students, and 27 high school students.

<table>
<thead>
<tr>
<th>Classification</th>
<th>No. of Students</th>
<th>Amount (Japanese Yen)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate students</td>
<td>44</td>
<td>37</td>
</tr>
<tr>
<td>College students</td>
<td>44</td>
<td>16</td>
</tr>
<tr>
<td>High school students</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>115</td>
<td>66</td>
</tr>
</tbody>
</table>

- **Yanmar donated construction machinery for the construction of a park that helps conserve the environment and contributes to the betterment of local communities.**

Construction of the Izumisano Hills Green Park is ongoing under the slogan “Creating Green Areas Jointly with Osaka Citizens” in the southern part of Osaka Prefecture. This project is being pursued as the concerted effort of prefectural citizens and corporations to create a park that promotes environmental improvement and environmentally friendly living for local people. Supporting the project as one of the corporate groups rooted in the Kansas district, Yanmar donated a compact ViO20-3 hydraulic excavator, a C10R crawler carrier, and a G2408-8LE power generator for construction of the park on January 13, 2009. In response, Osaka Governor, T. Hashimoto, issued a certificate of appreciation to Yanmar on March 27. The park is going to be a place of natural amenity and pleasure for prefectural citizens where a variety of natural habitats coexist including woods, bamboo forests, terraced paddy fields, and flower nurseries as the work continues.

- **Yanmar supports the Biodiesel Challenge Project, an attempt to drive around the world using biodiesel.**

Yanmar provides diesel power generators to the Biodiesel Challenge Project initiated by photo journalist Shusei Yamada. In 2008, Mr. Yamada drove through North Africa, Europe, Central Asia, and Russia and safely returned to Japan on December 1, 2008. The total traveling distance covered during the Project was 47,853 km. He was provided with used vegetable oil in various parts of the world, produced fuel in his car over 150 times, and successfully covered the entire distance using only biodiesel fuel. Mr. Yamada visited the head office of Yanmar on January 30, 2009, and talked about the hardships he experienced in gathering and refining used vegetable oil on his way. The warm friendship and communication with people going beyond racial barriers, and the high levels of reliability and durability of Yanmar’s generators that made a good showing in emergency situations.

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**Topics**

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Each of the Group companies is engaged in social contribution activities deeply rooted in each locality.

Voluntary Activities

Yanmar helps local communities enhance their societies by participating in voluntary activities that include cleaning projects. Such activities help increase the awareness of environmental importance.

- Participating in the All-out Lake Biwa Cleaning (Power System Operations Division)
  We participate in the all-out cleaning of Lake Biwa held annually on the Day of Lake Biwa (July 1), designated by Shiga Prefecture, and gather refuse and litter scattered on the lakeside.

- Holding the Cherry Blossom Festival in the Company’s Garden (Kanzaki Kokyu Manufacturing Co., Ltd.)
  Kanzaki Kokyu Manufacturing annually opens its garden to the public during the cherry blossom season, and invites local residents through their respective residents’ associations as well as the residents of local homes for the aged to deepen communication with local people.

- Support for the damage by the large-scale earthquake in Sichuan, China
  The major earthquake that occurred in Sichuan, China, on June 4, 2008, was a devastating natural disaster that took almost 70,000 lives. Aware of the agony that survivors and local residents are experiencing as they suffer shortages of electric power and continuing aftershocks, Yanmar Engine (Shanghai) Co., Ltd., a local Yanmar corporation in China, donated 10 portable power generator sets to China’s Red Cross. The donated generators were sent to the afflicted area by the Red Cross to help local people in their restoration efforts.

- Support for the Cyclone Damage in Myanmar
  On May 2, 2008, a powerful cyclone occurred in the southern part of Myanmar and wreaked great havoc. Yanmar immediately informed the Office of the United Nations High Commissioner for Refugees (UNHCR) of its intention to donate power generators, learned that there was great demand in the damage-stricken area in Myanmar for power generators, and swiftly arranged the donation of 62 power generator sets to the afflicted area via the UNHCR. As a result, rescue activities were considerably improved, and the UNHCR presented a letter of appreciation to Yanmar on August 26, 2008. At present, Yanmar’s power generators are being used in local restoration activities at 13 sites in Myanmar.

- Environmental Conservation Activities of Yanmar Agricultural Equipment (China) Co., Ltd.
  Yanmar Agricultural Equipment (China) Co., Ltd. started cleaning ErMaoshan mountain-climbing Road (an approximately 2 hour return journey on foot) adjacent to Wuxi Municipal Xihi Park in May 2008. In 2008, some 100 employees and their families, including the president participated in this activity intended to contribute to the betterment of the local community and enhance employees’ awareness of the environment.

Social Contribution Activities in Foreign Countries

- Support for the damage by the large-scale earthquake in Sichuan, China

Yanmar actively provides support to disaster-stricken areas and conducts environmental conservation activities outside Japan.
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Social Responsibility Report

Relationship with Society
The Yanmar Group is pursuing the 2012 Environmental Vision as a milestone of the centenary of our foundation to ensure thorough Group-wide implementation of environmental management.

Policies for Environmental Activities

Our society is facing a variety of serious problems, including global warming, the depletion of resources, the destruction of nature, and environmental pollution. True to its founding spirit of a “Grateful to serve for a better world” Yanmar has been engaged in environmental conservation activities ever since the company was established. In 1995, we established the Yanmar Global Environmental Charter, and all of Yanmar’s production facilities obtained certification for the ISO 14001 Environmental Management System standard in 1998. In those ways, Yanmar is making steady and continuous progress in its efforts to reduce environmental load.

In 2002, Yanmar updated its Yanmar Global Environmental Charter, creating the Yanmar Group Global Environmental Charter to further promote environmental awareness in the management philosophy of the Group as a whole.

Yanmar Group Global Environmental Charter

Environmental Philosophy

The Yanmar Group aims to contribute to the sustainable development of society by constructing a harmonious relationship between group development and the needs of the global environment.

Action Guidelines

1. We position environmental conservation as one of the most important management objectives of the Yanmar Group for the purpose of Group-wide environmental management.
2. We strictly observe the laws of all countries and the ordinances and regulations of all districts where we conduct production activities, and when necessary, establish voluntary environmental regulations in order to achieve superior levels of environmental conservation.
3. The Yanmar Group Environmental Committee establishes environmental protection guidelines and disseminates them throughout the Group to achieve an overall promotion of environmental conservation by the Group.
4. We actively disseminate environmental conservation information internally and externally to promote the understanding of Group companies and partners about the need for cooperation in the efficient promotion of environmental conservation activities.

Yanmar established the 2012 Environmental Vision to define goals to be achieve by 2012, the 100th anniversary of our founding. We never stop moving ahead with this vision as the common goal for the entire Group, working towards the realization of a sustainable society.

Environmental Vision

Second Environmental Mid-term Plan

Yanmar developed the Second Environmental Mid-term Plan (2006 - 2010) to achieve its 2012 Environmental Vision and has set 24 achievement goals in five domains of “Structure,” “Environmental Management,” “Business Operation,” “Product Measures” and “Society.”

In the field of “Product Measures,” we revised the product assessment regulation that incorporates environmentally conscious design into product development. Yanmar will further strive to promote and reinforce the life cycle assessment (LCA) in order to achieve these goals.

Target of the 2nd Environmental Mid-term Plan (2006 - 2010)
The Yanmar Group is pursuing the 2012 Environmental Vision as a milestone of the centenary of our foundation to ensure thorough Group-wide implementation of environmental management.

### Policies for Environmental Activities

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### Environmental Vision

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#### 2012 Environmental Vision

The Yanmar Group, in full recognition that it does handle products that can impose environmental load, undertakes to:

1. Contribute to the growth of a sustainable, resource-recycling society 
2. Provide number of products, so called, products that are compatible with both environmental and economic needs 
3. Foster a culture of environmental awareness and cooperation with society 

To achieve these objectives, the Group shall:

1. Construct extensive common environmental preservation systems for all consolidated companies in Japan and abroad 
2. Implement environmental preservation activities step-by-step, providing environmentally-friendly products 
3. Provide business measures in the prevention of global warming and reduction of harmful substances in order to stay one step ahead of the requirements 
4. Expand environmental education for associated companies and dealers

Second Environmental Mid-term Plan

Yanmar developed the Second Environmental Mid-term Plan (2006 - 2010) to achieve its 2012 Environmental Vision and has set 24 achievement goals in five domains of “Structure,” “Environmental Management,” “Business Operation,” “Product Measures” and “Society.”

#### Targets of the 2nd Environmental Mid-term Plan (2006 - 2010) and the Status of Achievement

- [ ] Target achieved
- [ ] Partially achieved (more than 70%)
- [ ] Not achieved (less than 70%)
- [ ] Evaluation as group results except some items in 2008

#### Measures for Environmental Activities

- **Environmental Audits:**
  - Transformation to a CSR Structure
  - Expansion of the Global Relationship between group development and the needs of the global environment.
  - Start of the use of consolidated accounting in production activities, and when necessary, establish voluntary environmental regulations in order to achieve superior levels of environmental conservation.

- **Environmental Compliance Audit:**
  - Environmental Audits
  - Environmental Performance Management
  - Environmental Audits
  - Environmental Audits

- **Environmental Information System:**
  - Expansion of the Global Environment Meeting
  - Environment Coordination
  - Environment Coordination
  - Environment Coordination

Yanmar established the 2012 Environmental Vision to define goals to be achieved by 2012, the 100th anniversary of our founding. We never stop moving ahead with this vision as the common goal for the entire Group, working towards the realization of a sustainable society.
Yanmar is engaged in the advancement of environmentally friendly techniques in all product fields.

R&D with Foresight

Yanmar has consistently been involved in the advancement of the environmental friendliness of all of our products, namely, the development of engines with cleaner emissions and lower noise and vibration levels. We contribute to the development of a recycling society by pursuing and providing products that help reduce environmental load.

Introduction of LCA

The Yanmar Group is introducing LCA (Life Cycle Assessment) that quantitatively ascertains the effects on the environment of a product throughout its entire lifecycle, as well as from the standpoint of the procurement of raw materials, production, transport, distribution, use and disposal of the product. The creation of numeric data reflecting the effects on the environment requires the accumulation and analysis of the necessary data for assessment from all related processes, namely from the design to production stages. We applied LCA to the tractors in FY2007.

In the future, we will apply LCA to our major representative products such as backhoes, GHPs, rice transplantaors, combines and boats.

Development of Environmental Technology

Yanmar takes on the challenge of further refining environmentally friendly technologies for our products to help create a recycling society. Specifically, our efforts in the area of cleaner engine emissions focus on the development of elemental technologies for emissions to cope with the emission regulations of a variety of countries around the world that are becoming stricter every year, resulting in compliance with the third and intermediate fourth EPA regulations. For marine engines, Yanmar became the first domestic manufacturer to acquire expert evidence for the second emission regulations of the IMO Agreement in May 2009. For removal of environmental load substances, the original target of “total disposal by 2008” was revised based on the actual results of the effort.

Yanmar’s Environmentally Oriented Products

Complying with the Emission Regulations of Various Countries around the World including EPA-Tier 4 of North America

MINIMAX Series (Vertical Water-cooled Diesel Engines)

This is a compact diesel engine designed using the concepts of “ultra compact and high performance,” “low noise and vibration,” and “environmental friendliness.”

The engine covers a power output range from 6 to 17 kW, and is intended for the compact power generator and lawn mower market. Due to the use of a ladder-frame structure, introduced to Yanmar products for the first time, this series features a reduction in noise of approximately 2 dB (A). In addition, compactness (power density) has been increased by approximately 10% in comparison with existing models.

Compact Horizontal Water-cooled Diesel Engine Type HB and Others Certified as Heritages of Industrial Modernization

The Heritage of Industrial Modernization is a scheme, initiated by the Japanese Ministry of Economy, Trade and Industry in 2007, which certifies buildings and machines that have supported the modernization of Japanese industries. Heritages useful for local revitalization. In 2008, the second year of the scheme, over 500 facilities and items were selected. Among these are engines conserved by Yanmar that were lauded as those among the “Additional 33 Heritages of Industrial Modernization in 2008” for their contributions to the growth of steam-engines and internal combustion engines that supported a wide variety of industries including heavy industry, agriculture, forestry and fisheries.

R&D Gasified Power Generation System Capable of Accepting a Wide Range of Biomass Wastes

Yanmar possesses a biomass-based power generation system that is fueled with seaweed which is then gasified to produce electric power. We are now developing a new system based on this existing system. The new system under development is capable of using various kinds of waste biomass including waste wood chips and bark generated during the production of lumber, twigs and branches trimmed from street trees, rice husk ash, and agricultural residuals, producing thermally decomposed gas, and supplying electric power and heat.
Yanmar is engaged in the advancement of environmentally friendly techniques in all product fields.

**R&D with Foresight**

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<table>
<thead>
<tr>
<th>Field</th>
<th>Low emission</th>
<th>Improvement of engine combustion</th>
<th>Improvement of engine combustion via electronic control technologies</th>
<th>Improvement of engine combustion via electronic control technologies applied to marine power plants in ships</th>
<th>Improvement of engine combustion via electronic control technologies applied to marine power plants in ships applied to marine power plants in ships</th>
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</thead>
<tbody>
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<td>Engine technology</td>
<td>Low emission</td>
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</table>

**System technology**

- Improvement of engine combustion efficiency
- Improvement of engine combustion via electronic control technologies
- Improvement of engine combustion via electronic control technologies applied to marine power plants in ships
- Improvement of engine combustion via electronic control technologies applied to marine power plants in ships applied to marine power plants in ships

**Agricultural technology**

- Ecology and economy in rice production
- Ecology and economy in rice production
- Ecology and economy in rice production
- Ecology and economy in rice production
- Ecology and economy in rice production

**Applied Technology**

- Construction equipment 
- Construction equipment 
- Construction equipment 
- Construction equipment 
- Construction equipment

**Labels Indicating Product Environmental Information**

The Environmental Label is intended to inform the market of the environmental aspects of a product or service, and serves as a judgment criterion for customers when selecting a product. ISO 14020 sets the standard for three Environmental Labeling schemes: Type I labels are awarded to products by a third party based on their predetermined standards. An example is Japan’s Eco Mark. Type II labels are based on a manufacturer’s self-declaration about a product’s environmental performance and are therefore called “self-declared labels.” Type III labels provide environmental data quantified based on the LCA method, and it is up to the purchaser to decide how to judge the information.

**Reduction of Environmental Load from Product Disposal**

Environmental consideration is incorporated into our products from their design stage so that the products can be easily disassembled, and the disassembled parts easily recycled. In the design and development stage, factors related to the dismantling and recycling performance of a product are quantified as numeric values, and targets are set based on these values. These targets allow us to determine the environmental load of products as well as the parts or materials that constitute the products when they are disposed of. We will continue to perform further investigations of how products are disposed of in order to achieve greater improvements in this area.

**Yanmar’s Environmentally Oriented Products**

- **Industrials Engines**
  
  **Complying with the Emission Regulations of Various Countries around the World including EPA-Tier 4 of North America**

  **MINIMAX Series**
  
  **Vertical Water-cooled Diesel Engines**
  
  **CP35VC (35 kW Micro Cogeneration System)**
  
  In November 2008, Yanmar launched the 35 kW Micro Cogeneration System. This product is fitted with technology of our own development, the high-efficiency lean-burn mirror cycle engine 40HP-106 Type that optimizes ignition timing and mixture in the combustion chamber. It features the world’s highest level of power generation efficiency in this class, or 34%, thereby achieving improvements both in energy saving and economic efficiency.

  As it allows for multiple operation of up to 16 units (power generation capacity ranging from 35 kW to 560 kW), this product realizes extremely high-efficiency operation for large-scale users such as hospitals, welfare facilities, business hotels and factories by ensuring optimal unit number operation control with regard to changes in power demands at such large facilities.

**The Field of Energy**

**Power Generation Efficiency of 34%, the World’s Highest Level in this Class, Achieved**

**Gasified Power Generation System Capable of Accepting a Wide Range of Biomass Wastes**

Yanmar possesses a biomass-based power generation system that is fueled with sawdust which is then gasified to produce electric power. We are now developing a new system based on this existing system. The new system under development is capable of using various kinds of waste biomass including waste wood chips and bark generated during the production of lumber, twigs and branches trimmed from street trees, rice husk ash, and agricultural residuals, producing thermally decomposed gas, and supplying electric power and heat.

**Compact Horizontal Water-cooled Diesel Engine Type HB**

This is a compact diesel engine designed using the concepts of "ultra compact and high performance," "low noise and vibration," and "environmental friendliness." This engine covers a power output range from 6 to 17 kW, and is intended for the compact power generator and lawn mower market. Due to the use of a ladder-frame structure, introduced to Yanmar products for the first time, this series features a reduction in noise of approximately 2 dB (A). In addition, compactness (power density) has been increased by approximately 10% in comparison with existing models.

**Compact Horizontal Water-cooled Diesel engine Type HB**
Yanmar’s Environmentally Oriented Products

The Field of Agriculture

Standard Combine that Realizes High Efficiency and Performance with a Built-in Threshing Unit

Soybean Combine GS380
Soybean Combine GS380, put on the market in 2008, is equipped with a new TNV engine (maximum output of 38 ps / 2,800 rpm) that complies with the second emission regulations. In addition, a newly developed “rolling type pipe concave” reduces the ratio of dirty beans by approximately 60% in comparison with our own existing machines, thereby realizing increases in yields of high-quality beans. Furthermore, the use of a new axial flow long rotor and weight-savings in the machine help the GS380 realize 1.2 times greater operational efficiency and 1.5 times greater processing capability, and yet reduces fuel consumption by 10% in comparison with its former models.

Home-use Mini Cultivator Featuring both Ease of Use and Environmental Friendliness

QT10e
This mini cultivator is the best choice for home gardens that are growing in number these days, satisfying “easiest of use” and “environmental friendliness.” As it uses a battery and a motor designed to be recharged with a home-use 100V power source, it eliminates troublesome engine maintenance, start-up operation, and fuel procurement, and therefore is ready for use by mechanically challenged users. Use of a battery means that the cultivator has “zero emissions.” In addition, a unique “motor in motor” mechanism (motor and decelerator installed in the front shaft) realizes an optimal weight balance by providing high operational efficiency and downsizing the motor output. Other environmentally friendly features include low noise (engine ratio - 20 dB) and zero waste fuel.

The Field of Marine Products

Family-oriented Boat with Excellent Environmental and Safety Performance

Hunt24 (Model: EF24AZ)
A complete diversion away from the conventional focus on fishing, the Hunt24 was developed as a product for family use. Environmentally, the Hunt24 has better fuel consumption, or approximately two thirds that of gasoline outboards due to a newly installed four-stroke diesel engine. Use of a new technique that produces cabins and hatches using LFTM (light-resin transfer molding) remarkably reduces discharges of VOCs (volatile organic compounds) into the air. Passages have been installed on both sides of the cabin for easy movement to the front deck. Safety performance has also been enhanced by installing handrails on the bow and the sides of the cabin.

Construction Machinery

Complying with the Latest Emission Regulations in Japan, US and Europe

Crawler Backhoe SV100-1
The SV100-1 is equipped with a direct fuel-injection engine that complies with Japanese non-road special motor vehicle emission regulations, US EPA Tier-3 emission regulations, and Euro 3A regulations. Improved efficiency of the hydraulic system also realizes improved fuel consumption approximately 20% better than conventional machines. The SV100-1 is an environmentally friendly machine with lower CO2 emissions, one of the causes of global warming. It also boasts excellent recyclability as steel is used for the bonnet and cover for ease of repair and reuse.

Highest Class Output Engine with Environmental Friendliness

6CXB-GT
This new engine is capable of providing the highest output in its class (363 kW: below 4.0 tons in tonnage category) while reducing fuel consumption by approximately 10% at the rated output, and remarkably lowering the smoke ratio (in comparison with existing engines). This business use engine also complies with the IMO II emission regulations (NOx emissions) to be applied in 2011. To realize enhanced output, the major components of the engine, or crankshaft, cylinder block, and clutch, feature optimized strength and rigidity levels. In addition, the fuel injecting timing has been optimized with the use of a timer mechanism for low emissions, and the geometry of the air supply and exhaust passages have also been optimized for reductions in fuel consumption. With these innovations, the targets of high output, high reliability and low emissions have simultaneously been satisfied by this earth-friendly 6CXB-GT engine.

Energy-saving Live Fish Tank (FS6000NA) Won the Chairman’s Award of the Japan Machinery Federation

Yanmar’s horizontal convection filter live fish tank won the 2008 Japan Machinery Federation Chairman’s Award. Live fish tanks are water tanks to keep fish and shellfish alive, and are used at local wholesale markets, fishery cooperatives and supermarkets in Japan. Since live fish tanks have to operate circulation pumps on a 24 hours basis due to their structure, energy saving had posed a problem. The FS6000NA has incorporated various energy-saving techniques including the installation of an energy-saving circulation pump developed by us, and the use of an FRP insulated structure for the water tank and the water channel, thereby realizing power savings of more than 70% in comparison with the previous products. Sanitary performance has also been enhanced by installing an ultraviolet sterilizing unit. Yanmar is helping to reduce CO2 emissions by actively encouraging the replacement of currently operating live fish tanks with energy-saving ones.

Topics

Yanmar’s Environmentally & Social Report 2009
Soybean Combine GS380
Soybean Combine GS380, put on the market in 2008, is equipped with a new TNV engine (maximum output of 38 ps / 2,800 rpm) that complies with the second emission regulations. In addition, a newly developed “rolling type pipe concave” reduces the ratio of dirty beans by approximately 60% in comparison with our own existing machines, thereby realizing increases in yields of high-quality beans. Furthermore, the use of a new axial flow long rotor and weight-savings in the machine help the GS380 realize 1.2 times greater operational efficiency and 1.5 times greater processing capability, and yet reduces fuel consumption by 10% in comparison with its former models.

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This new engine is capable of providing the highest output in its class (563 kW: below 4.0 tons in tonnage category) while reducing fuel consumption by approximately 10% at the rated output, and remarkably lowering the smoke ratio (in comparison with existing engines). This business use engine also complies with the IMO II emission regulations (NOx emissions) to be applied in 2011. To realize enhanced output, the major components of the engine, or crankshaft, cylinder block, and clutch, feature optimized strength and rigidity levels. In addition, the fuel injecting timing has been optimized with the use of a timer mechanism for low emissions, and the geometry of the air supply and exhaust passages have also been optimized for reductions in fuel consumption. With these innovations, the targets of high output, high reliability and low emissions have simultaneously been satisfied by this earth-friendly 6CXB-GT engine.

Yanmar’s Environmentally Oriented Products

Standard Combine that Realizes High Efficiency and Performance with a Built-in Threshing Unit
Yanmar’s Environmentally Oriented Products

The Field of Agriculture
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Home-use Mini Cultivator Featuring both Ease of Use and Environmental Friendliness
QT10e
This mini cultivator is the best choice for home gardens that are growing in number these days, satisfying “ease of use” and “environmental friendliness.” As it uses a battery and a motor designed to be recharged with a home-use 100V power source, it eliminates troublesome engine maintenance, start-up operation, and fuel procurement, and therefore is ready for use by mechanically challenged users. Use of a battery means that the cultivator has “zero emissions.” In addition, a unique “rotor in motor” mechanism (motor and decelerator installed in the fork shaft) realizes an optimal weight balance by providing high operational efficiency and downsizing the motor output. Other environmentally friendly features include low noise (engine ratio - 20 dB) and zero waste fuel.

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Yanmar is striving to reduce CO₂ emissions at our production sites for the prevention of global warming.

Promotion of Energy Savings

The Yanmar Group is reducing all kinds of energy used in production activities, including electricity and fuel, in order to tackle the challenge of contributing to the prevention of global warming.

The Yanmar Group has set a target of a 5% reduction in energy consumption and a 5% reduction in CO₂ emissions in unit requirements by 2010 in comparison with 2005.

In 2006, the Group undertook the challenge of reducing energy consumption in production processes and introducing high-efficiency equipment. Through this challenge, the Group was able to reduce energy consumption and CO₂ emissions in unit requirements by 9.1%.

Introduction of the Power Regenerator

In the Amagasaki Plant, we introduced 7 power regenerating systems that recover power generated from durability testing of engines as electric energy, which can regenerate a maximum of 400 MWh of electric energy per year and reduce CO₂ emissions by 346 tons.

In 2008, three power regenerating systems were introduced to the Amagasaki Plant to regenerate electricity produced in test operations, apply it as power for the operation of equipment, and the cooling fans of the load equipment formerly driven by commercial power were shifted to regeneratively driven.

The load equipment was also changed from conventional water tanks to a heater-equipped dry type, which resulted in a 10% decrease in water consumption.

Environmental Conservation in Distribution

Improvement of Shipping Efficiency

The Yanmar Group works with Yanmar Logistics Service Co., Ltd., which is in charge of product shipping for our Group, to promote the rationalization of distribution so as to realize Group-wide reductions in environmental loads.

The revision of the Energy Saving Act in April 2006 means of transport from trucking to freight trains and ships to reduce CO₂ emissions from shipping activities.

Introduction of Low-emission Vehicles

The Yanmar Group is systematically shifting to low-emission vehicles such as low-emission gas or hybrid cars for company cars and sales personnel cars. The ratio of low-emission vehicles in FY2008 was 63.6%, and Yanmar continues to introduce more low-emission vehicles into its fleet.

Promotion of Modal Shift

The Yanmar Group expedites "modal shift" that switches means of transport from trucking to freight trains and ships to reduce CO₂ emissions from shipping activities.

Energy Saving Activities of the Group Companies

Being a member of the Team Minus 6%, a group organized for promoting the prevention of global warming, the Yanmar Group is engaged in varying energy-saving activities:

- Replacing lighting equipment with energy-saving types
- Promoting lights-out during lunchtimes and after hours
- Implementing ‘Cool Biz’
- Replacing cooling water pumps with inverter types (for adjusting water volumes through control of rotational speed) (CO₂ reduction of 23 tons per year) [Amagasaki Plant]
- Introduction of recycling equipment for water-soluble cutting fluids [Amagasaki Plant]
- Replacing air-conditioners with energy-saving GHPs [Marine Operations Dept., Amagasaki Plant, Research & Development Center, Biwa Plant, Yanmar Agricultural Machinery Manufacturing, Yanmar Construction Equipment Sales]
- Replacing substation transformers with top-runner types to reduce transformation losses [Marine Operations Dept.]
- Recycling solvents used in coating processes through the introduction of automatic solvent recycling equipment (recovery and reuse of 78% of waste thinner) [Marine Operations Dept.]
- Energy saving by installing pneumatic piping dedicated to thermal processing [Kanzaki Kokyukoki]
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- Energy saving by installing pneumatic piping dedicated to thermal processing [Kanzaki Kokyukoki]
- Energy saving by turning off substation breakers (VCBs) on days-off [Kanzaki Kokyukoki]
- Energy saving by turning off substation breakers (VCBs) on days-off [Kanzaki Kokyukoki]
- Converting waste materials such as wooden pallets or packing wood boxes into bioethanol [Kanzaki Kokyukoki]
- Tanabata lights-out campaign (total lights-out in sites)
- Eco safety driving campaign

Yanmar won the highest environmental ranking consecutively for four years in the environmental rating of the Development Bank of Japan

The 2008 ranking was the Group’s fourth consecutive win in the development bank’s environmental rating.

In November 2008, the Development Bank of Japan (Ministry of Finance) provided Yanmar Co., Ltd. (President Takahito Yamada) with financing employing environmental ratings in cooperation with Shiga Bank Ltd., which won the highest ranking consecutively.

The DBJ Environmental Rating is the world’s first rating to assess the financial performance of companies that demonstrate the achievement of specified environmental performance criteria.
Yanmar is striving to reduce CO₂ emissions at our production sites for the prevention of global warming.

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In 2008, the Group undertook the challenge of reducing energy consumption in production processes and introducing high-efficiency equipment. Through this challenge, the Group was able to reduce energy consumption and CO₂ emissions in unit requirements by 10% in 2008.

**Introduction of the Power Regenerator**

In the Amagasaki Plant, we introduced 7 power regenerating systems that recover power generated from durability tests of engines as electric energy, which can regenerate a maximum of 900 MWh of electricity per year and reduce CO₂ emissions by 346 tons.

In 2008, three power regenerating systems were introduced to the Amagasaki Plant to regenerate electricity produced in test operations, apply it as power for the operation of equipment, and the cooling fans of the load equipment formerly driven by commercial power were shifted to regenerable electricity.

The load equipment was also changed from conventional water tanks to a heater-equipped dry type, which resulted in a 10% decrease in water consumption.

**Environmental Conservation in Distribution**

- **Improvement of Shipping Efficiency**
  - The Yanmar Group works with Yanmar Logistics Service Co., Ltd., which is in charge of product shipping for the Group, to promote the rationalization of distribution so as to realize Group-wide reductions in environmental loads.
  - The revision of the Energy Saving Act in April 2006 requires every merchant to put effort into saving energy. The Yanmar Group assigns Energy Saving Officers at Yanmar sites and transport companies to quantitatively check and monitor the distribution loads of the Group activities, including consigned distribution, and develops and promotes energy saving programs.

- **Promotion of Modal Shift**
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[Contents of Evaluation]
- True to its founding spirit of "Grateful to serve for a better world," Yanmar is determined to fulfill its social responsibility by getting involved in activities that aim at creating harmony between the society and the environment, thus enhancing the value of enterprise.
- Yanmar is helping users reduce environmental loads by providing environmentally conscious products that comply with the strict emission regulations of a variety of countries around the world.
- Yanmar is engaged in advanced undertakings toward the realization of clean alternative fuels including biofuels.
- Yanmar boasts high environmental performance as evidenced by a 7.7% reduction in CO₂ in unit requirements relative to the previous year.

The DBJ Environmental Rating is the world’s first financing scheme to introduce the special technique of “environmental rating,” which ranks a company’s level of environmental management using a screening system developed by DBJ, selects excellent companies and provides preferential interest rates in three stages of financing according to the rating.
Yanmar is engaged in the formation of a cyclic society by promoting reductions and recycling of wastes, and the conversion of wastes into valuable resources.

**Waste Reduction**

The Yanmar Group is taking aggressive actions to curb the generation of waste from production processes and decrease the total amount of waste disposal by promoting the recycling of waste by type, converting the waste into materials with value.

To ensure thorough separation of waste by type, employees have been properly informed of the importance of waste separation by a list of waste separation rules posted at necessary locations, including waste storage sites in plants, worksites and offices. Employee education programs are used to promote understanding. Efforts are also made to promote further recycling, including the introduction of returnable pallets. Waste oil produced from plants is also converted into a valuable resource by using improved production processes that prevent foreign materials from mixing with the oil.

Other actions taken to reduce costs include the reuse of cardboard materials as valuable types and the recycling of shredded paper waste.

By 2010, we aim to achieve a 10% reduction relative to the 2005 level. In FY2008, we reduced waste generation by 37.1% in unit requirement.

- **Waste production and unit requirement of waste production (Yanmar Co., Ltd.)**
- **Recycling rate (Yanmar Co., Ltd.)**

**Recycling of Abandoned FRP Boats**

It is difficult to dispose of FRP boats because of their high strength, which is one of the reasons why the number of illegally abandoned FRP boats is increasing. The FRP boat recycling system was started by the Japan Boating Industry Association upon acquisition of wide-area authorization by the Environment Minister in 2005. A total of 2,319 FRP boats during the four years from 2005 to 2008 were recycled. 1,152 of these, or 49.7%, were surfboard or disabled boats including illegally dumped boats, the recycling of which is requested by local governments with grants from the Japan Foundation. 871 boats were general demonstration FRP boats recycled by their owners at their own cost.

Currently, the FRP boat recycling system has given rise to approximately 123,266 tons of water consumed during FY 2008.

**Reduction in Water Resource Consumption**

Our active promotion of the recycling of water for plants has allowed us to reduce water resource consumption by 29.3% relative to the standard level of 2005 in unit requirements, with approximately 123,266 tons of water consumed during FY 2008.

**Environmental & Social Report 2009**
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Active participating in this system, the Yanmar Group readily fulfills its role as an FRP boat manufacturer in terms of EPR11 by promoting the appropriate disposal of FRP boats as part of our efforts to form a recycling society and prevent illegal dumping.

- FRP boats (FRP boats that are included in the plan) greatly strengthen the body of a boat and generally ensure a durability of over 30 years. The boats used are mainly FRP boats (FRP boats are called FRP boats hereinforward) made by manufacturing FRP.
- EPR: extended product responsibility

**Changes in the number of disabled FRP boats recycled (Yanmar Co., Ltd.)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Ordinary disabled boats</th>
<th>Disposed boats handled by local governments (with grants)</th>
<th>Disposed boats handled by local governments (without grants)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>1,000</td>
<td>200</td>
<td>300</td>
</tr>
<tr>
<td>2006</td>
<td>900</td>
<td>200</td>
<td>300</td>
</tr>
<tr>
<td>2007</td>
<td>800</td>
<td>200</td>
<td>300</td>
</tr>
<tr>
<td>2008</td>
<td>700</td>
<td>200</td>
<td>300</td>
</tr>
</tbody>
</table>

**Recycling rate (Yanmar Co., Ltd.)**

<table>
<thead>
<tr>
<th>Year</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate</td>
<td>46%</td>
<td>45%</td>
<td>44%</td>
<td>43%</td>
</tr>
</tbody>
</table>

**Reduction in Water Resource Consumption**

Our active promotion of the recycling of water for plants has allowed us to reduce water resource consumption by 29.3% relative to the standard level of 2005 in unit requirements, with approximately 123,266 tons of water consumed during FY 2008.

**Water consumption and unit requirement for water consumption (Yanmar Co., Ltd.)**

<table>
<thead>
<tr>
<th>Year</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit consumption</td>
<td>423</td>
<td>404</td>
<td>386</td>
<td>368</td>
</tr>
<tr>
<td>Unit requirement for water consumption</td>
<td>460</td>
<td>440</td>
<td>420</td>
<td>400</td>
</tr>
</tbody>
</table>

Yanmar purses the appropriate management and reduction of chemical substances to reduce environmental risks.

**Legal Compliance and Prevention of Pollution**

The Yanmar Group aggressively pursues the appropriate management and reduction of chemical substances according to applicable laws and regulations, including the PRTR Act, in order to avoid environmental risks associated with production activities. We annually submit reports on the amounts of PRTR-controlled substances emitted or moved with respect to our business activities.

All plants of Yanmar strictly practice the appropriate storage, management and notification of PCB-containing equipment, including capacitors, in accordance with the PCB Special Measures Act and the Waste Disposal Act.

Reduction in Chemical Substance Emission

The Yanmar Group is reducing the consumption and emissions of PRTR-controlled substances and voluntarily banned some substances as part of its efforts to develop environmentally-friendly products and reduce environmental risks. The amount of PRTR-controlled substances used in FY2008 was reduced by 169 tons relative to 2007. This consumption was an 8% reduction in unit production volume relative to the standard level of 2001.

We continue to pursue and use alternative materials instead of substances that have been controlled voluntarily, or through regulations.

**Yanmar’s Consumption of Chemicals Covered under the PRTR Act**

<table>
<thead>
<tr>
<th>Name of Chemical</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water soluble zinc compounds</td>
<td>372</td>
<td>383</td>
<td>368</td>
<td>362</td>
</tr>
<tr>
<td>Trichromium</td>
<td>7,333</td>
<td>8,033</td>
<td>7,111</td>
<td>6,630</td>
</tr>
<tr>
<td>Water</td>
<td>12,400</td>
<td>14,800</td>
<td>13,650</td>
<td>14,000</td>
</tr>
<tr>
<td>Styrene</td>
<td>15,680</td>
<td>18,111</td>
<td>15,450</td>
<td>14,000</td>
</tr>
<tr>
<td>Ethylene glycol</td>
<td>15,000</td>
<td>20,000</td>
<td>15,000</td>
<td>10,000</td>
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**Use of PRTR substances**

<table>
<thead>
<tr>
<th>Name of Chemical</th>
<th>FY 2005</th>
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<th>FY 2007</th>
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<td>10,000</td>
</tr>
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</table>
Yanmar has set up a fine-tuned implementation structure to achieve appropriate environmental management.

Implementation Structures
The Yanmar Group Global Environmental Committee, consisting of top executives from each Group company, was established in 2002 to promote high-level environmental management for the Group as a whole. Each Group company has its own Global Environmental Committee that takes the initiative in promoting environmental conservation activities under the leadership of the top management of the company. The Yanmar Group Coordination Meeting is also formed by the secretaries of those company-level committees as a subordinate organization of the Yanmar Group Global Environmental Committee, and engages in the communication of activity policies and discussion of activity status. In addition, the Product Subcommittee, consisting of the development managers of Group companies, was established under the Coordination Meeting and undertakes various activities to improve the environmental performance of our products.

Acquisition of ISO 14001 Certification
The Yanmar Group promotes company-wide efforts to achieve ISO 14001 certification, an international standard for environmental management systems, as part of our efforts to continuously promote environmental conservation activities (See the table of ISO 14001 Certification on Site on page 49).

We also help group companies planning to acquire ISO 14001 certification establish their own environmental management systems so as to ensure smooth and efficient activities toward acquisition. We endeavor to encourage both domestic and international non-producing facilities to acquire certification.

Environmental Audits
ISO 14001 certified facilities are committed to continuously improving their environmental management systems. Specifically, their environmental policies are disclosed and their environmental performance periodically audited to ensure ISO compliance. Internal audits are conducted annually, likewise third-party examinations by an external certification organization.

Implementation of the Environmental Compliance Audit
Environmental compliance audits were carried out for the five sites of the Yanmar Group, i.e. the Yanamoto Plant, Kinomoto Plant, Koga Division of Yanmar Casting Technology, Yanmar Logistics Service, and Yanmar Energy System Manufacturing in 2008.

The audits revealed certain discrepancies requiring improvement, including no submission of necessary notifications, inadequate monitoring of management conditions, and unclear indications of storage locations on signboards.

Accordingly, these sites were instructed to make necessary corrections including clarification of the scope of legal control and the subjects of control and notification of necessary reports and renewal. In addition, we instructed them to “visualize” management conditions and indicate information again on signboards.

Prevention of Air Pollution
Yanmar endeavors to prevent air pollution during operations, including recovery of exhaust gas emitted from engine durability tests and pre-shipment product test runs with exhaust gas recovery equipment.

Prevention of Soil and Water Pollution
Pollutant checks are conducted on parcels of land scheduled for sale or alternative use and any pollution emerging is subject to remedial measures with the guidance and attendance of the administration.

Quality control for water discharged from our plants is strictly regulated by setting our own voluntary standard more stringent than applicable legal requirements. A number of studies on water quality are also conducted assuming a spill accident once a year to ensure continual alertness whenever an accident may occur.

Measures against Noise and Malodor
All complaints from local residents concerning noise or malodors are recorded. In response, we hold briefing meetings to explain the situation and immediately take actions for correction or improvement.

We also take measures to prevent, mitigate and avoid noise and odors detrimental to neighbors by installing active silencing systems (system products manufactured by our company) and equipment designed to remove black smoke.

Reduction of Environmental Risk
Regular proactive drills and updating of risks are conducted for foreseeable risks to prevent the occurrence of risks such as environmental pollution. The Yanmar Group identifies environmental risks, in line with ISO 14001, and updates them as required by taking necessary actions, conducting drills or making internal audits. Identified environmental risks are reported to the Risk Management Committees as those affecting the entire Group for recording and annual updating.

Legal Compliance
Yanmar vows to comply with environmentally related laws and ensure strict control of relevant operations, including the retention and reporting of measurement records.

There were no group-wide violations of applicable laws in 2008, but an accident involving a diesel oil spillage occurred. Although this was immediately taken care of and no serious aftereffects occurred, we conducted a complete inspection of equipment at all sites as a preventive measure.
Yanmar has set up a fine-tuned implementation structure to achieve appropriate environmental management.

### Implementation Structures

The Yanmar Group Global Environmental Committee, consisting of top executives from each Group company, was established in 2002 to promote high-level environmental management for the Group as a whole. Each Group company has its own Global Environmental Committee that takes the initiative in promoting environmental conservation activities under the leadership of the top management of the company. The Yanmar Group Coordination Meeting is also formed by the secretariats of those company-level committees as a subordinate organization of the Yanmar Group Global Environmental Committee, and engages in the communication of activity policies and discussion of activity status. In addition, the Product Subcommittee, consisting of the development managers of Group companies, was established under the Coordination Meeting and undertakes various activities to improve the environmental performance of our products.

### Acquisition of ISO 14001 Certification

The Yanmar Group promotes group-wide efforts to achieve ISO 14001 certification, an international standard for environmental management systems, as part of our efforts to continuously promote environmental conservation activities (See the table of ISO 14001 Certification by Site on page 49).

We also help group companies planning to acquire ISO 14001 certification establish their own environmental management systems so as to ensure smooth and efficient activities toward acquisition. We endeavor to encourage both domestic and international non-producing facilities to acquire certification.

### Environment Audits

Environmental compliance audits were carried out for the five sites of the Yanmar Group, i.e. the Yamamoto Plant, Kinomoto Plant, Koga Division of Yanmar Casting Technology, Yanmar Logistics Service, and Yanmar Energy System Manufacturing in 2008. The audits revealed certain discrepancies requiring improvement, including no submission of necessary notifications, inadequate monitoring of management conditions, and unclear indications of storage locations on signboards.

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Yanmar emphasizes environmental education to enhance the environmental awareness of each and every employee.

Environmental Education

Yanmar provides continuous environmental education to help each employee improve his or her awareness of the environment. Our environmental education consists of general courses for new recruits and general employees, and special courses for employees engaged in special work and for internal environmental auditors. Thus, Yanmar employees can participate in educational programs that are well suited to their specific job requirements.

- Environmental Education for New Recruits

New recruit education is provided to new employees to promote environmentally appropriate actions at the job sites to which they are assigned. They acquire a basic understanding of environmental issues and deepen their understanding of the environmental activities of the Yanmar Group.

- Environmental Education at Production Sites

Education on methodologies and technologies related to environmental protection is provided to all employees, based on their jobs, at every plant once a year. Facilities that have acquired ISO 14001 certification provide environmental education and training to employees in line with this ISO standard. Employees working at worksites that can have a major impact on the environment are provided with special training that teaches the employees about the operating procedures of relevant equipment and systems. Employees thus learn to ensure environmental protection at their job sites.

External educational institutes are also used to help our employees obtain qualifications related to the environment.

- Education at Yanmar Co., Ltd.

<table>
<thead>
<tr>
<th>Skill Category</th>
<th>General Education</th>
<th>Special Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work practices for boilers, input-waste processing facilities, etc.</td>
<td>Not specified</td>
<td>Not specified</td>
</tr>
<tr>
<td>ISO Auditing methods</td>
<td>Not specified</td>
<td>Not specified</td>
</tr>
<tr>
<td>ISO environmental regulations and Yanmar standards</td>
<td>Not specified</td>
<td>Not specified</td>
</tr>
<tr>
<td>Legal regulations</td>
<td>Not specified</td>
<td>Not specified</td>
</tr>
<tr>
<td>Environmental auditing</td>
<td>Not specified</td>
<td>Not specified</td>
</tr>
<tr>
<td>Auditing techniques</td>
<td>Not specified</td>
<td>Not specified</td>
</tr>
<tr>
<td>Auditing equipment</td>
<td>Not specified</td>
<td>Not specified</td>
</tr>
<tr>
<td>Auditing reform methods</td>
<td>Not specified</td>
<td>Not specified</td>
</tr>
<tr>
<td>Auditing environmental target setting and implementation</td>
<td>Not specified</td>
<td>Not specified</td>
</tr>
<tr>
<td>Auditing environmental target setting and implementation</td>
<td>Not specified</td>
<td>Not specified</td>
</tr>
<tr>
<td>Auditing environmental target setting and implementation</td>
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<td>Not specified</td>
</tr>
<tr>
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<td>Not specified</td>
<td>Not specified</td>
</tr>
</tbody>
</table>

Environmental Awareness through Internal Publications

The latest information is provided to employees through “ECHO,” an internal publication produced by the Yanmar Group. Every issue includes information that helps employees keep abreast of the latest environmentally related information. Since the spring issue of 2008, ECHO has featured information on CSR for greater awareness of corporate social responsibility.

- Environmental Exhibitions

Yanmar exhibited products at the Lake Biwa Environmental Business Messe environmental industrial fair held at the Nagahama Domos in Shiga Prefecture from November 5 to 7, 2008. This is one of Japan’s largest environmental industrial fairs, which is held annually in Shiga, the trailblazing prefecture in the field of the environment. We have participated in this exhibition every year since its start, and focused on the comprehensive capabilities of the Yanmar Group under the theme of the “Environment” in this 11th event. We exhibited environmental products and the efforts of each division and department in our booth. In addition, we introduced our environmental management. Among these, the high-performance compact diesel engine MINIMAX, which features a small “size” but high “power,” drew a particularly large amount of attention.

- Environmental Exhibitions

- Donation of Engine for Trial Use with Biodiesel Fuel

Yanmar is engaged in a variety of activities toward the formation of a resource recycling society. As one of these efforts, we invited applications for donations of Yanmar engine for trial use using biodiesel fuel on our website, screened the applicants, and decided to donate one to the Tokai University Challenge Center Trans-Japan Caravan Team (South Route) on March 31, 2009. The caravan team is driving a bus fueled by biodiesel from Kyoto to Kantō while promoting the need for “prevention of global warming” at local elementary and junior and high schools in locations they visit.

- Supporting the Kotonarie Summer Festa

Yanmar supported an eco event for reductions in environmental loads, the Kotonarie Summer Festa 2008, held at Hibi Park, Higashinomi City, Shiga Prefecture, from August 9 to 16, 2008. Following on from the previous year, Yanmar provided a power generator set (K47/K65) for trial use with biodiesel in the 5th event in 2008. The venue was decorated with lights for each theme, and part of the electricity for some 250,000 lights was provided by the Yanmar power generator. The fuel that was used consisted of vegetable oil gathered from local residents, which was then refined into biodiesel. The Festa attracted over 100,000 visitors every year and is establishing itself as one of the local summer attractions.
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<thead>
<tr>
<th>Staff Category</th>
<th>General Education</th>
<th>Special Education</th>
</tr>
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<tbody>
<tr>
<td>Staff special study</td>
<td>Work practices for boilers, liquid waste processing facilities, etc.</td>
<td></td>
</tr>
<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>Internal environmental auditors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISO environmental regulations and Yanmar standards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(basic knowledge)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General staff</td>
<td>Environmental targets and business division</td>
<td></td>
</tr>
<tr>
<td>New recruits</td>
<td>Training environmental issues</td>
<td></td>
</tr>
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Environmental Exhibitions

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- Trial use power generator set (G45T3SS)
Eco Balance

The Yanmar Group understands the need to quantitatively measure and ascertain the environmental loads created by all stages of its business activities, namely from raw material procurement to production, transportation, distribution, use and disposal. It is also essential that we strive as required to reduce these loads.

In fiscal year 2009, environmental loads were measured at production plants of Group companies to gather the necessary data. In future, we will continue striving to determine the environmental loads created at each stage of the product life cycle, and promote the analysis and review of the identified loads for all companies, including Group companies.

**Calculation**

1. **CO₂ Emission**
   - Calculated by multiplying electricity or fuel consumed by a "CO₂ emission factor." The "CO₂ emission factor" used here is based on the greenhouse effect gas emission calculation and report manual of an act related to the "Promotion of the Measures to Cope with Global Warming." Note that the CO₂ emission factor for electric power is fixed at 0.378 t-CO₂/1,000 kWh.

2. **SOx Emission**
   - Calculated by multiplying heavy oil and light oil consumed by "specific gravity" and "S content ratio."

3. **NOx Emission**
   - Calculated from the exhaust gas data of combustion facilities.

4. **PRTR-controlled Substances**
   - Calculated based on the regulations of an act related to reports, etc., about "Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management."

**Business Activities**

- **Development and Design**
  - Ecology & Economy
  - Development of environmentally-friendly products

- **Procurement of Materials**
  - Reduction in chemical materials
  - Green procurement

- **Production**
  - Prevention of global warming (energy savings)
  - Waste reduction
  - Reduction in hazardous chemical materials
  - Underground piping survey
  - Storage of equipment containing PCB

- **Distribution**
  - Reduction in packaging materials
  - Introduction of low-emission vehicles

- **Sales and Service**
  - Provision of environmentally-friendly goods

- **Use**
  - Provision of information on appropriate use and disposal

- **Recovery and Dismantling**
  - FRP boat recycling
  - Design for ease of recycling at time of disposal

**OUTPUT**

- **Discharge into the Atmosphere**
  - CO₂: 142,952 t
  - NOx: 281.5 t
  - SOx: 76.7 t

- **Discharge into Waters**
  - Sewage: 501,503 m³
  - River: 1,018,017 m³
  - BOD: 20.4 t
  - COD: 13.7 t

- **Generation and Disposal of Waste**
  - Waste generated: 37,742 t
  - Waste recycled: 13,723 t
  - Waste finally disposed of: 20,631 t

- **Discharge into the Atmosphere, Resulting from Distribution**
  - CO₂: 266.9 t

**Products**

- Number produced: 415,143 units
- Production horsepower: 16,137,000 PS

**Reference Data**

Environmental Performance Data
Eco Balance

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  - Waste reduction
  - Reduction in hazardous chemical materials
  - Underground piping survey
  - Storage of equipment containing PCB 1,744 pcs.

- **Distribution**
  - Reduction in packaging materials
  - Introduction of low-emission vehicles

**Reference Data**

- **Environmental Performance Data**

**OUTPUT**

- **Discharge into the Atmosphere**
  - CO₂: 142,952 t-CO₂
  - SOx: 76.7 t
  - NOx: 281.5 t
  - PRTR-controlled substances: 572 t

- **Discharge into Waters**
  - Sewage: 501,503 m³
  - River: 1,018,017 m³
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  - COD: 13.7 t

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- **Discharge into the Atmosphere, Resulting from Distribution**
  - CO₂: 266.9 t-CO₂

- **Waste Generation**
  - No. produced: 415,143 units
  - Production horsepower: 16,137,000 PS

- **Water Resources**
  - Total water resource input 1,635,664 m³
  - Groundwater: 1,013,637 m³
  - River: 1,018,017 m³
  - BOD: 20.4 t
  - COD: 13.7 t

- **Distribution Energy**
  - Diesel oil: 101.9 t

- **Products**
  - No. produced: 415,143 units
  - Production horsepower: 16,137,000 PS

**INPUT**

- **Energy**
  - Electricity: 187,739 MWh
  - Bunker A: 9,317 kl
  - Kerosene: 526 kl
  - Diesel oil: 1,494 kl
  - Gasoline: 273 kl
  - Town gas: 3,624,000 m³

- **Materials**
  - Oil 1,040 kl
  - (Yanmar Co., Ltd.)
  - Electricity 187,739 MWh
  - Bunker A 9,317 kl
  - Kerosene 526 kl
  - Diesel oil 1,494 kl
  - Gasoline 273 kl
  - Town gas 3,624,000 m³
  - Coke 5,908 t
  - LPG, etc. 4,882 t
  - Diesel oil 101.9 kl

**Discharge into the Atmosphere**

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**Waste Generation**

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Environmental Accounting

The purpose of environmental accounting is to fully and quantitatively grasp and analyze costs related to environmental conservation in business activities and the resulting effects, to provide feedback to business activities, and to share the analyzed data with related parties in and out of the company in order to promote the understanding of Yanmar environmental activities. Data compilation complies with the Environmental Accounting Guidelines of the Ministry of the Environment.

- Cost of Environmental Conservation
  The total cost of environmental conservation for fiscal year 2008 was approximately ¥6.1 billion, 92% of which was for R&D. The principal business activities of Yanmar involve the manufacturing and sales of engines, and since R&D expenses for new engines result from the improvement of fuel efficiency and gas emission, nearly all of these expenses fall within the category of environmental conservation.

- Future Developments
  We started to announce our environmental accounting information in 2003. We will continue to announce information for use in environmental management tools and indices.

Environmental Qualifications

- Number of Staff Members with Major Environmental Qualifications

ISO 14001 Certification by Site

- Yanmar Domestic Facilities

- Group Companies

- Yanmar Group Overseas Companies

Number of Staff Members with Major Environmental Qualifications

- Number of Staff Members with Major Environmental Qualifications (Yanmar Co., Ltd.)

Green Purchasing Ratio

A member of the Green Purchasing Network of the Japan Environment Association, the Yanmar Group promotes green purchasing that favors products with less environmental load, such as Eco Mark products, when purchasing office supplies.

- Green purchasing ratio (Yanmar Co., Ltd.)
Environmental Accounting

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Effects of Environmental Conservation Activities

We have been able to successfully reduce energy consumption, fuel consumption, service water consumption, and waste material output per production unit volume compared with the previous year.

Future Developments

We started to announce our environmental accounting information in 2003. We will continue to announce information for use in environmental management tools and indices.

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A member of the Green Purchasing Network of the Japan Environment Association, the Yanmar Group promotes green purchasing that favors products with less environmental load, such as Eco Mark products, when purchasing office supplies.

YANMAR Environmental & Social Report 2009
Biwa Plant
Kawamichi-cho 1055-2
Nagahama, Shiga Pref.

Business Outline
Integrated production (development, machining process, assembly, test operation, painting, and shipping) of vertical WC diesel engines for use with farm machinery, construction equipment, and industrial equipment in general.

Business Outline
Casting and machining process for aluminum alloy parts that are vital for reductions in the weights of engines, and the design and production of dies.

Yanomoto Plant
Yanomoto 3180 Kohokucho
Higashi-azai-cho, Shiga Pref.

Business Outline
Integrated production (machining, assembly, test operation, shipping) of Fuel Oil injection nozzles, a key component of a diesel engine.

Yamagata Plant
Sanwa-cho 7-35 Nagahama, Shiga Pref.

Business Outline
Integrated production (machining to test operation) of main and auxiliary marine engines, as well as land and industrial engines, gas engines, and compressors.

Omori Plant
Shigeru 354 Takatsuki-cho
Ika-gun, Shiga Pref.

Business Outline
Integrated production (machining, assembly, test operation, shipping) of Fuel Oil injection nozzles, a key component of a diesel engine.

Business Outline
Integrated production (machining, assembly, test operation, shipping) of Farm Oil injection nozzles, a key component of a diesel engine.

Tsukaguchi Plant
Tsukaguchi-Honmachi 5-3-1, Amagasaki

Business Outline
Integrated production (machining to test operation) of marine and auxiliary marine engines, as well as industrial diesel engines, gas engines, and compressors.

Nagahama Plant
Sho 18 Nishi-azai-cho
Ika-gun, Shiga Pref.

Business Outline
Integrated production (machining, assembly, test operation, shipping) of Fuel Oil injection nozzles, a key component of a diesel engine.

Business Outline
Integrated production (machining, assembly, test operation, shipping) of Farm Oil injection nozzles, a key component of a diesel engine.

Nagahama Site
Kawamichi-cho 1009-2
Nagahama, Shiga Pref.

Business Outline
Integrated production (development, machining process, assembly, test operation, painting, and shipping) of vertical WC diesel engines for use with farm machinery, construction equipment, and industrial equipment in general.

Business Outline
Casting and machining process for aluminum alloy parts that are vital for reductions in the weights of engines, and the design and production of dies.

Kinomoto Plant
Kumada 550 Kinomoto-cho
Ika-gun, Shiga Pref.

Business Outline
Integrated production covering machining process for crank shafts, and piston heads for diesel engines; pressing, welding, resin molding, and painting of tractor parts; and assembly, operation and shipment of diesel and gasoline engines.

Nagamasa Site
Sameo-cho 7-35 Nagahama, Shiga Pref.

Business Outline
Design and development of internal combustion engines for agricultural equipment, construction machinery, industrial equipment, and marine engines. In addition, the company engages in research and service as a distribution center for tractor parts and engines, and service as a distribution center for large diesel engines.

Input/Output

<table>
<thead>
<tr>
<th>Category</th>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric</td>
<td>31,778</td>
<td>3,419</td>
</tr>
<tr>
<td>Diesel</td>
<td>32</td>
<td>15</td>
</tr>
<tr>
<td>Kerosene</td>
<td>82</td>
<td>7</td>
</tr>
<tr>
<td>Gasoline</td>
<td>288</td>
<td>52</td>
</tr>
<tr>
<td>Oil</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Water</td>
<td>6,994</td>
<td>9,418</td>
</tr>
</tbody>
</table>

| Gasoline | 3,066 | 4,580  |
| Kerosene | 2,350 | 4,130  |
| Diesel   | 480   | 2,02  |

| Energy Consumption | Gasoline | 3,066 | 4,580  |
|                   | Kerosene | 2,350 | 4,130  |
|                   | Diesel   | 480   | 2,02   |

| Discharge (Waste-water) | Gasoline | 3,066 | 4,580  |
|                        | Kerosene | 2,350 | 4,130  |
|                        | Diesel   | 480   | 2,02   |

| Groundwater | 6,994 | 9,418  |
| Clean water | 3,066 | 4,580  |
| Rainwater   | 2,350 | 4,130  |

| Dust and Soot | Gasoline | 3,066 | 4,580  |
|               | Kerosene | 2,350 | 4,130  |
|               | Diesel   | 480   | 2,02   |

| Input/output | Gasoline | 3,066 | 4,580  |
|             | Kerosene | 2,350 | 4,130  |
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### Yanmar Co., Ltd. Production Plants in Japan

#### Biwa Plant
- **Yamamoto Plant**
  - **Kawasumi-cho 1005-2 Nagahama, Shiga Pref.**
  - **Business Outline**
    - Integrated production (development, machining processes, assembly, test operation, shipping and inspection) of vertical WC (Water Cool) engines for use with sea machinery, operation equipment and industrial equipment in Japan.

#### Yamamoto Plant
- **Yamamoto 3186 Kohoku-cho Higashi Azai-gun, Shiga Pref.**
- **Business Outline**
  - Casting and machining processes for aluminum alloy parts that are used for components of vertical water-cooled engines, and the design and production of diesel engine parts.

#### Nagahama Plant
- **Nagasu-Higashidori 1-1-1, Amagasaki, Shiga Pref.**
- **Amagasaki Plant**
  - **Sanwa-cho 7-35 Nagahama, Shiga Pref.**
  - **Business Outline**
    - Integrated production covering machining process for crank shafts and cylinder head; pressing, welding, resin molding, and painting of tractor parts; and assembly, operation and shipping of diesel and gasoline engines.

#### Kinomoto Plant
- **Kumota 550 Kinomoto-cho Ika-gun, Shiga Pref.**
- **Business Outline**
  - Design and development of internal combustion engines for agricultural equipment, construction machinery, industrial vehicles, marine engines, etc. also processing jigs for engine parts; and service as a distribution center for the products of six plants in the Shiga Zone.

#### Omori Plant
- **Shigenomori 314 Takatsukicho Ika-gun, Shiga Pref.**
- **Business Outline**
  - Integrated production (machining, assembly, test operation, shipping) of Fuel Oil injection pumps, a key component of a diesel engine.

#### Nagahama Site
- **Shiogama-cho 11-11 Shiga Pref.**
- **Tsukaguchi Plant**
  - **Tsukaguchi-Honmachi 5-3-1, Amagasaki**
  - **Business Outline**
    - Integrated production (machining, assembly, test operation, shipping) of Fuel Oil injection nozzles, a key component of a diesel engine.

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### Reference Data Site Report

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<table>
<thead>
<tr>
<th>Plant Location</th>
<th>Business Outline</th>
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<tbody>
<tr>
<td>Kawasumi-cho 1005-2 Nagahama, Shiga Pref.</td>
<td>Integrated production (development, machining processes, assembly, test operation, shipping and inspection) of vertical WC (Water Cool) engines for use with sea machinery, operation equipment and industrial equipment in Japan.</td>
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<tr>
<td>Yamamoto 3186 Kohoku-cho Higashi Azai-gun, Shiga Pref.</td>
<td>Casting and machining processes for aluminum alloy parts that are used for components of vertical water-cooled engines, and the design and production of diesel engine parts.</td>
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<td>Sanwa-cho 7-35 Nagahama, Shiga Pref.</td>
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<td>Shiogama-cho 11-11 Shiga Pref.</td>
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<td>Tsukaguchi-Honmachi 5-3-1, Amagasaki</td>
<td>Integrated production (machining, assembly, test operation, shipping) of Fuel Oil injection nozzles, a key component of a diesel engine.</td>
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</tbody>
</table>
Yanmar Agricultural Machinery Manufacturing Co., Ltd.

- Business Outline: Manufacture of agricultural equipment and engines for tractors.
- Business Site: Okayama Site of Seirei Industry Co., Ltd.

Kochi Site of Seirei Industry Co., Ltd.

- Business Outline: Manufacture of agricultural machinery including medium and large-sized combines, self-propelled tractors, and marine engines.

Kanazawa Kogyoki Mfg. Co., Ltd.


Yanmar Energy System Mfg. Co., Ltd.

- Business Outline: Manufacture of outdoor units and micro gas cogeneration systems.

**History of Yanmar Group Environmental Activities**

- **1994**
  - Environmental Improvement Division established.
  - Environmental Basic Law established.
  - Waste Disposal Law revised.
  - Water Pollution Control Law revised.

- **1995**
  - Yanmar Global Environmental Charter established and distributed.
  - Environmental Public Relations and Environmental Management rules established.

- **1996**
  - Environmental Impact Assessment Law established.
  - Waste Disposal Law revised.
  - Environmental Impact Assessment Law established.
  - Kyoto Protocol adopted.

- **1997**
  - Large Power Products Operations Division certified under ISO 14001.
  - Water Pollution Control Law revised.
  - PCO Action Plan submitted to Kansai Electric Power Co., Inc.
  - Kyoto Protocol adopted.

- **1998**
  - Six plants of the Power System Operations Division certified under ISO 14001.
  - Environmental Impact Assessment Law established.
  - Kyoto Protocol adopted.
  - Kyoto Protocol adopted.

- **1999**
  - Environmental Protection Basic Rule and organization implementation rules established.
  - Green Procurement Law established.

- **2000**
  - Kyoto Protocol adopted.
  - Construction Recycling Law established.
  - Environmental Protection Basic Rule and organization implementation rules established.
  - Green Procurement Law established.

- **2001**
  - Full-scale rationalization of packing and shipping.
  - Full-scale rationalization of packing and shipping.

- **2002**
  - First Global Environment Committee held.
  - Environmental Protection Basic Rule and organization implementation rules established.
  - End-of-Life Automobile Recycling Law established.

- **2003**
  - Environmental Protection Basic Rule and organization implementation rules established.
  - Environmental Protection Basic Rule and organization implementation rules established.

- **2004**
  - Environmental Protection Basic Rule and organization implementation rules established.
  - Environmental Protection Basic Rule and organization implementation rules established.

- **2005**
  - Environmental Protection Basic Rule and organization implementation rules established.
  - Environmental Protection Basic Rule and organization implementation rules established.

- **2006**
  - Environmental Protection Basic Rule and organization implementation rules established.
  - Environmental Protection Basic Rule and organization implementation rules established.

- **2007**
  - Environmental Protection Basic Rule and organization implementation rules established.
  - Environmental Protection Basic Rule and organization implementation rules established.

- **2008**
  - Environmental Protection Basic Rule and organization implementation rules established.
  - Environmental Protection Basic Rule and organization implementation rules established.

**Reference Data**

- **Yanmar Environmental & Social Report 2009**

**Site Report**

- **Yanmar Environmental & Social Report 2020**
**Major Domestic Group Companies (Production)**

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<tr>
<th>Company</th>
<th>Business Outline</th>
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<td>Yanmar Agricultural Machinery Manufacturing Co., Ltd.</td>
<td>Business Outline</td>
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Please direct inquiries about this Environmental & Social Report to:
Planning Group
Corporate Social Responsibility Dept.
Yanmar Co., Ltd.
1-32 Chayamachi
Kita-ku Osaka 530-8311
Japan
TEL : 06-6376-6258
FAX : 06-6373-9272
http://www.yanmar.co.jp/