



The Yokohama Rubber Co., Ltd.

# Environmental and Social Report 2007

Combating Global Warming



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### About the Cover

The theme of the cover photograph is "Nurturing Woodland." As a part of its activities to protect the global environment, the Yokohama Rubber Group plans over the next three years to plant approximately 220,000 *persea*, *castanopsis*, and other trees at all of its plants in Japan. Group volunteers will work alongside local residents and outside volunteers to develop woodland over the coming decade, starting with gathering acorns. (See p. 52 for details.)

### Note Concerning Forward-looking Statements

This report contains projections, statements regarding plans and objectives, and other forward-looking statements. All such statements are made based on assumptions and judgments derived from information available as of July 2007, and are subject to risks and uncertainties that could cause actual performance or results to differ, including not only the business activities of the Yokohama Rubber Group, but also global economic trends and changes in the global environment. Please be aware of this when you read this report.

## From the Editor

This report has been produced with the aim of increasing understanding of the Yokohama Rubber Group's activities among customers, shareholders, investors, business partners, employees, local communities, and other stakeholders. It begins by explaining management's thinking, corporate philosophy, and practice of corporate governance. This is followed by the chapter on "Action on the environment" which describes the activities being pursued to achieve the Yokohama Rubber Group's goal of "asserting world-class strengths in technologies for protecting the environment." This year we particularly focused on the report on Activities to Combat Global Warming. In the chapter entitled "Coexistence with society," we then look at relations with our customers, shareholders and investors, employees, and local communities. Note that in order to reduce the number of pages in this publication and conserve paper resources, detailed information on Yokohama Rubber's production sites, and subsidiaries and affiliates at home and abroad, is published instead under the "Site information" section of our website ([http://www.yrc-pressroom.jp/env\\_en](http://www.yrc-pressroom.jp/env_en)) from this year.

### Period Covered by Report

From April 2006 to March 2007 ("fiscal 2006"). Major developments up to July 2007 are also included.

### Scope of Content

Environmental, social, and business aspects of Yokohama Rubber and its Japanese and foreign subsidiaries and affiliates.

### Scope of Organizations

Yokohama Rubber and its Japanese and foreign subsidiaries and affiliates. Please note, however, that the data on environmental performance cover only Yokohama Rubber's eight production sites. Some information on Yokohama Rubber's production sites, the production sites of its subsidiaries and affiliates, and non-production sites can be found under the "Site information" section at our website.

### Reference Guidelines

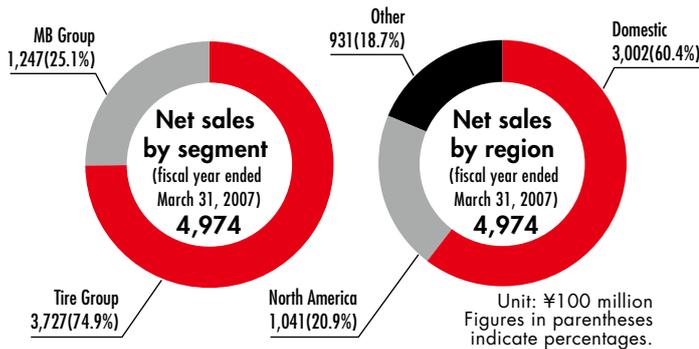
Ministry of the Environment of Japan,  
*Environmental Reporting Guidelines 2007*.  
Global Reporting Initiative,  
*Sustainability Reporting Guidelines 2002*.

### Next Report

The next report is scheduled for release in September 2008.

# The Yokohama Rubber Group in Overview

The Yokohama Rubber Group consists of Yokohama Rubber itself, 181 subsidiaries, and 56 affiliates. The ratio of Tire Group sales to sales from the MB Group is three to one, and overseas sales' contribution to total sales is 40%.



## Tire Group

The Tire Group manufactures and distributes tires, tubes, aluminum wheels, and automotive parts for passenger cars, trucks and buses, light trucks, construction and mining equipment, industrial vehicles, aircraft, and other applications.

### Subsidiaries and Affiliates: 196

- 10 manufacturer/distributors, including
  - Yokohama Tire Corporation
  - Yokohama Tire Philippines, Inc.
  - Hangzhou Yokohama Tire Co., Ltd.
  - Yokohama Tire Manufacturing (Thailand) Co., Ltd.
  - Other
- 186 distributors, including
  - Yokohama Tire Tokyo Hanbai, Co., Ltd.
  - Yokohama Tire Kinki Hanbai Co., Ltd.
  - Yokohama Tire (Canada) Inc.
  - Yokohama Tyre Australia Pty. Ltd.
  - Yokohama Corporation of America
  - Other



## Yokohama Rubber at a Glance

Company Name:	The Yokohama Rubber Co., Ltd.
Established:	October 13, 1917
Head Office:	36-11, Shimbashi, 5-chome, Minato-ku Tokyo 105-8685, Japan
President and Representative Director:	Tadanobu Nagumo
Paid-in Capital:	¥38,900 million
Net Sales:	¥497,400 million (fiscal year ended March 31, 2007)
Number of Employees:	15,423 (as of March 31, 2007)
Factory and Plants:	8 in Japan (one factory and seven plants) 15 overseas*

\*Manufacturer/distributors and manufacturers overseas

## MB Group

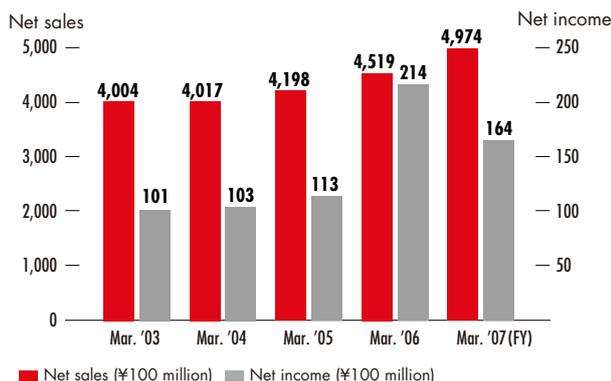
"MB" stands for "multiple business" (i.e., diversified and expanded operations). The MB Group produces and distributes a diversity of products, including conveyor belts, hoses, industrial products, adhesives, aircraft products, and golf products.

### Subsidiaries and Affiliates: 41

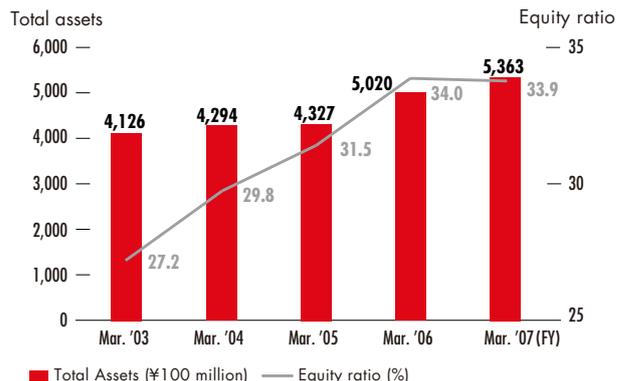
- 11 manufacturer/distributors, including
  - SAS Rubber Company
  - YH America, Inc.
  - SC Kingflex Corporation
  - Yokohama Rubber (Thailand) Co., Ltd.
  - Other
- 30 distributors and other operations, including
  - Yokohama Rubber MBE Corporation
  - PRGR Co., Ltd.
  - Yokohama Aerospace America, Inc.
  - Hamagomu Aicom Inc.
  - Hamagomu Real Estate Co., Ltd.
  - Other



## Trends in net sales and net income



## Trends in total assets and equity ratio



Message from the President

# Combating Global Warming



A handwritten signature in black ink that reads "T. Nagumo". The signature is stylized and fluid.

Tadanobu Nagumo  
*President and Representative Director*

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## **Committed in GD100 to asserting world-class strengths in technologies for protecting the environment**

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Grand Design 100, our new medium-range management plan unveiled in 2006, commits the Yokohama Rubber Group to asserting world-class strengths in technologies for protecting the environment, and the following three guiding principles will take us toward attaining this goal: the practice of consistent, high-level global environmental management at all our operations worldwide, the development of environmentally sound products to minimize environmental impact in all our products, and the pursuit of world-class environmental action at our operations in the form of, for example, 100% recycling of all industrial waste.

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## Urgently tackling global warming is the biggest challenge we now face

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The biggest challenge confronting nations across the world today is that of preventing global warming by cutting emissions of greenhouse gases. As concern over global warming mounts, exemplified by the interest engendered by the 79th Academy Award-winning film *An Inconvenient Truth* and its depiction of the environmental crisis now faced, action to combat global warming is likely to gather pace in the United States and around the world. For our part, we consider it our duty to steadily implement our plans one by one in accordance with the basic principles laid down in GD100.

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## Action growing throughout the Yokohama Rubber Group

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The Yokohama Rubber Group is pursuing a variety of activities based on medium to longer-term perspectives, and these activities are producing concrete results. In fiscal 2006, for instance, greenhouse gas emissions were cut by 8.2%, exceeding the 6% target set by the Kyoto Protocol. We have also been awarded the highest possible environmental rating by the Development Bank of Japan, and our head office operations have been ISO14001 certified. Above all else, however, I have been struck by the solidity of the mechanisms that we have put in place to minimize the impact of our activities on the environment, stimulating the level of environmental activity being pursued throughout the group.

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## Clear definition of environmentally sound products spurs development

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If we take product development as an example, arrangements have been put in place for defining numerically just what an “environmentally sound product” is. This has made it possible to determine the proportion of environmentally sound products among our current lineup, enabling us to take major steps toward achieving our objective of making all our products eco-friendly products. Newly launched products include the DNA dB super E-spec passenger car tire, which is made from 80% non-petroleum resources, and the new ZEN eco-brand of tires for trucks and buses, and we have also conducted tests aimed at developing commercial applications for a porous elastic road-surfacing material that we have

developed to reduce the amount of noise made by vehicles on roads. Furthermore, in order to improve management of chemicals and logistics, we have established supply chain arrangements that further strengthen collaboration with our business partners, while at home and abroad, steady progress is being made by group companies as they migrate to environmental management practices that are on a par with those followed by Yokohama Rubber.

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## Hoping to work with local communities on the YOKOHAMA Forever Forest project to grow woodland

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In addition to these activities undertaken in the course of our everyday operations, fiscal 2007 will also see the launch of the YOKOHAMA Forever Forest project to plant trees around our plants across the country to create woodland over the next decade. We believe that this will not only contribute to the fight against global warming, but also create areas of woodland in which local residents can safely relax and enjoy themselves.

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## Meeting the expectations of our diverse stakeholders

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We recognize that our stakeholders—customers, shareholders and investors, business partners, employees, and local residents—have wide-ranging expectations of the Yokohama Rubber Group, including compliance, quality, safety, and corporate social responsibility, as well as concern for the environment. One of our management policies is to “deal fairly with society and value harmony with the environment,” and we intend to fulfill our social responsibilities as a corporate citizen to meet these expectations of our diverse stakeholders by ensuring that all our employees throughout the group and across the world follow this principle in their daily activities.

I hope that this report will deepen the reader’s understanding of the Yokohama Rubber Group’s environmental and social activities, and I look forward to hearing the feedback that it generates.

# Corporate Philosophy, History, and New Medium-range Management Plan

## Corporate Philosophy

### Basic Philosophy

“To enrich people’s lives and contribute to their greater happiness and well-being by devoting our wholehearted energies and advanced technology to the creation of beneficial products.”

### Management Policies

- Take on the challenge of new technologies to produce new value.
- Develop proprietary business fields to expand the scope of business.
- Create a workplace that values, improves and energizes people.
- Deal fairly with society and value harmony with the environment.

## History

- 1917** Established under the name “Yokohama Rubber Manufacturing” in Uratakashima-cho, Yokohama, Kanagawa Prefecture, as a joint venture between Yokohama Cable Manufacturing Co., Ltd. and BF Goodrich of the United States
- 1921** Hiranuma Plant built in Yokohama
- 1923** Operations suspended at the Hiranuma Plant due to the Great Kanto Earthquake, and head office transferred to Kojimachi-ku in Tokyo
- 1943** Mie Plant built in Watarai-gun in Mie Prefecture
- 1945** Head office transferred to Minato-ku in Tokyo
- 1946** Mishima Plant built in Mishima City, Shizuoka Prefecture
- 1950** Listed on the first sections of the Tokyo and Osaka Stock Exchanges
- 1952** Hiratsuka Factory built in Hiratsuka City, Kanagawa Prefecture
- 1958** Development of first environmentally sound product (pneumatic fender)
- 1963** Company name changed to “The Yokohama Rubber Co., Ltd.”
- 1964** Shinshiro Plant built in Shinshiro City, Aichi Prefecture
- 1969** Yokohama Tire Corporation established as a tire distributor in the U.S.
- 1971** Environmental Improvement Dept. established
- 1973** Ibaraki Plant built in Higashi-Ibaraki-gun, Ibaraki Prefecture
- 1974** Onomichi Plant built in Onomichi City, Hiroshima Prefecture
- 1988** Tire manufacturer GTY Tire Company established in the U.S. as a joint venture with General Tire of the U.S. and Toyo Tire & Rubber Co., Ltd.
- 1989** U.S. tire manufacturer The Mohawk Rubber Company acquired
- 1992** The Mohawk Rubber Company merged with Yokohama Tire Corporation  
Environmental Conservation Dept. established
- 1996** Yokohama Tire Philippines, Inc. established as a tire manufacturer and distributor in the Philippines  
Yokohama Rubber (Thailand) Co., Ltd. established as a manufacturer and distributor of MB products in Thailand
- 1998** Mishima Plant is first in the Yokohama Rubber Group to be ISO14001 certified  
Launch of DNA eco-tire
- 2001** Hangzhou Yokohama Tire Co., Ltd. established as a tire manufacturer and distributor in China  
ISO14001 certification of all eight production sites in Japan completed
- 2004** Yokohama Tire Manufacturing (Thailand) Co., Ltd. established in Thailand
- 2005** Yokohama Rubber (China) Co., Ltd. established as headquarters for operations in China
- 2006** Shandong Yokohama Rubber Industrial Products Co., Ltd. established as a conveyor belt manufacturer and distributor in China  
Suzhou Yokohama Tire Co., Ltd. established as a tire manufacturer and distributor in China  
“Asserting world-class strengths in technologies for protecting the environment” adopted as a basic policy of the new GD100 new medium-range management plan
- 2007** Yokohama India Pvt. Ltd. established as a local subsidiary in India

\*Items in light green indicate environmental activities.

## New GD100 Medium-range Management Plan

The Yokohama Rubber Group has adopted a new medium-range management plan called "Grand Design 100." The aim of this plan, dubbed "GD100" for short, is to transform the group into a global company with a distinctive presence in terms of corporate value and market position in the company's centenary in 2017, and it adopts as specific targets for attainment in fiscal year ended March 31, 2018 net sales of ¥1 trillion and operating income of ¥100 billion. Phase I of the plan, which will run from fiscal year ended March 31, 2007 to fiscal year ended March 31, 2009, was launched in April 2006. GD100 aims to achieve business growth

and expansion in accordance with the business and technology strategies adopted by the Tire and MB Groups. At the same time, it lays down policy for fulfilling social responsibilities as befits a global company. In addition to stating the group's basic stance as a manufacturer of "delivering the best products at competitive prices and on time," the plan also commits Yokohama Rubber to "asserting world-class strengths in technologies for protecting the environment" and "fostering a customer-oriented corporate culture that honors rigorous standards of corporate ethics."

### GD100 Vision and Basic Policy

#### By Centenary in 2017

To evoke a distinctive global identity in building corporate value and in building a strong market presence

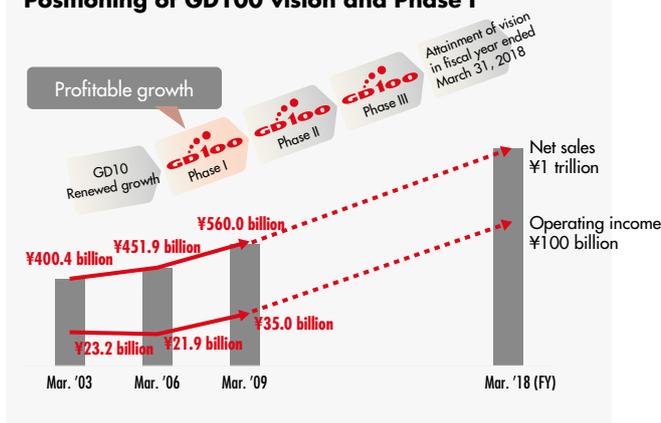
#### Long-term Financial Targets (year to March 31, 2018)

Net sales: ¥1 trillion, Operating income: ¥100 billion, Operating return on sales: 10%

#### Basic Policy for Fulfilling Vision

- To deliver the best products at competitive prices and on time
- To assert world-class strengths in technologies for protecting the environment
- To foster a customer-oriented corporate culture that honors rigorous standards of corporate ethics

#### Positioning of GD100 vision and Phase I



#### Numerical targets of GD100 Phase I

	Unit: ¥100 million	Phase I		
		Mar. '06 Actual result	Mar. '07 Actual result	Mar. '08 Projection
Net sales	4,519	4,974	5,400	5,600
Tires	3,357	3,727	4,080	4,330
MB	1,162	1,247	1,320	1,270
Operating income	219	211	320	350
Ordinary income	190	201	270	270

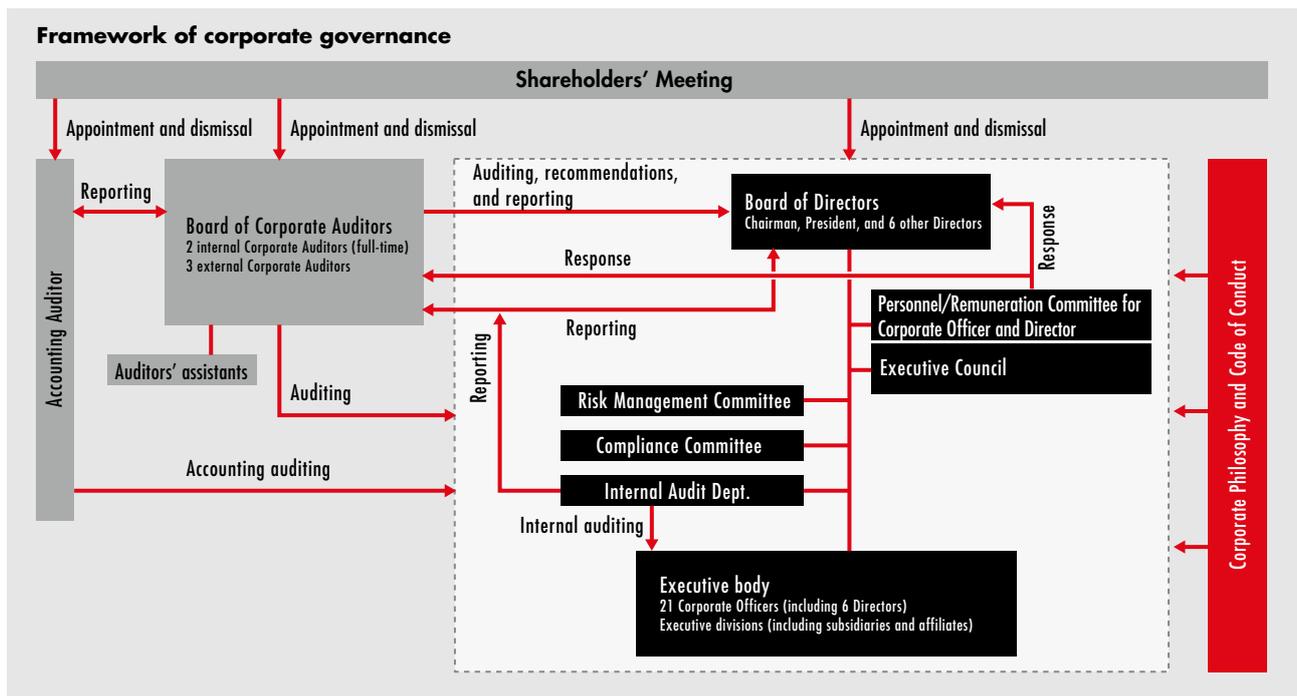
Projections for the year ended March 31, 2008 are the figures announced on August 9, 2007.

# Corporate Governance

## Framework for Corporate Governance

Recognizing the importance of ensuring transparency and swifter, better quality decision-making and execution if we are to respond appropriately to business and social

conditions and move toward the goals set by GD100 and raise corporate value, we have established the framework for corporate governance shown below.



## Management Framework

Rigorous action is taken to clarify the roles of Directors and Corporate Officers and to speed up management decision-making and execution. The medium and long-term outlook concerning GD100 is also confirmed each year to ensure that management does not descend into short-termism. The main functions are as follows.

### Board of Directors

The Board of Directors does management decision-making and audits the performance of their duties by Directors and Corporate Officers.

### Executive Council

The council's main members are the Chairman, President, and Directors. Its role is to deliberate the performance of key business and important matters of risk management based on the basic management principles, and it supports the strategic functions of management.

### Personnel/Remuneration Committee for Corporate Officer and Director

This committee ensures the transparency and fairness on personnel and remuneration matters for Directors and Corporate Officers.

### Auditing Framework

Yokohama Rubber employs the corporate structure of a "company with a Board of Corporate Auditors." In order to strengthen auditing capabilities, the number of outside Corporate Auditors was increased by one. Of the five Auditors, therefore, three are now from outside, thus ensuring that audits are performed fairly and independently of the Board of Directors.

### Accounting Auditor

The company retains Ernst & Young ShinNihon as its Accounting Auditor.

## Yokohama Rubber Group Compliance

Compliance is the linchpin of corporate governance. We see compliance not simply as a matter of observing and not infringing laws, rules, and regulations but also as acting in accordance with the values and ethics required of a better corporate citizen.

### Basic Stance on Compliance Activities

When the Corporate Compliance Department was set up in 2005, the main thrust of activities was to eliminate thinking and behaviors that ran contrary to compliance. Since then, however, action has further developed into activities designed to implement the "Yokohama Rubber Group Code of Conduct." We are working to further enhance and strengthen compliance arrangements, such as by reviewing actual conditions and identifying problems and challenges on the spot during the execution of operations.

### Compliance Regulations

A "Yokohama Rubber Group Code of Conduct" has been established, which is to be observed and practiced by all employees of the Yokohama Rubber Group in Japan. All employees carry compliance cards, and priority is given to making decisions in accordance with the "Compliance Guidelines" when it is unclear what course of action employees should take.



Compliance card

### Compliance Framework

Compliance promoters are appointed in each organization, and compliance officers in each group company, in order to organize training and education to prevent violations of compliance issues before they occur. Due to the diversification of compliance needs, ongoing education is provided concerning subjects including changes in the social environment and amendments to relevant legislation. In fiscal 2006, 12 reports were made to the Compliance Advisory Center (five from within the group and seven from outside sources), all of which were reported to the Compliance Committee and were dealt with sincerity toward the reporters.

## "High ethical standards" are at the heart of GD100



Keigo Ueda

Director and Senior Managing Corporate Officer in charge of Corporate General Affairs Dept., Internal Audit Dept., General Manager of Hiratsuka Factory, General Manager of Corporate Compliance Dept., and President of Hamagomu Real Estate Co., Ltd.

The Yokohama Rubber Group sees "fostering a customer-oriented corporate culture that honors rigorous standards of corporate ethics," which is one of the basic policies of GD100, as a top priority in business. Led by the Corporate Compliance Department and some 140 compliance officers throughout the group, action has been taken to ensure compliance with laws and regulations by the group as a whole. In May 2007, however, Yokohama Rubber underwent an on-site inspection by the Japan Fair Trade Commission on suspicion of contravening the Anti-Monopoly Law in regard to the sale of marine hoses, and we apologize unreservedly for the concern and anxiety that this has caused to our stakeholders. Corporations have in recent years increasingly been required to act in a socially responsible manner around the world, and the Yokohama Rubber Group will in the future be pursuing even more rigorous compliance than in the past so as to provide socially relevant goods and services, while at the same time preventing misconduct before it arises in order to become an enterprise that earns the trust and confidence of society.

### Compliance Training

Regular training courses are held continuously within the company and the group as a whole. An e-learning course launched in fiscal 2006 has been completed by around 720 employees, and a variety of other seminars and courses have been held to raise legal awareness among employees. A course on compliance with the Anti-Monopoly Law that kicked off in 2006 has been taken by a total of 1,200 employees.

### Data Security

Information technology is already a key element of the social infrastructure, and is vital to business systems. Education on data protection and control is being expanded to the group as whole in order to ensure rigorous implementation of regulations concerning corporate data, customer data, and personal data protection.

## Internal Control Project Now in Progress

With the entry into effect of the Corporations Law in May 2006, the Board of Directors decided on a basic policy of reaffirming and continuously improving the existing internal control system in order to further strengthen arrangements for voluntary checks on business management. In January 2007, the Internal Control Department was established and the internal control project launched as work began on strengthening internal control and ensuring the propriety of financial reporting. Combined total of 35 briefings and presentations have been held involving 700 employees from throughout the Yokohama Rubber Group.

### Scope of development of internal controls

Scope of development of internal controls under the Corporations Law	Financial Instruments and Exchange Law	<b>Provisions concerning financial reporting (J-SOX confirmation)</b> Document, work flow, process statement, risk control matrix
		<b>Matters other than financial reporting (confirmation documents)</b>
		<b>Compliance with laws and ordinances</b>
		<b>Risk management</b>
		<b>Efficiency of performance of duties</b>

## Response to Various Risks

Countermeasures are taken to deal with all kinds of risks, including accidents, disasters, product liability, material violations of laws and ordinances, and takeover bids. Regarding large-scale stock purchases that could harm Yokohama Rubber's corporate value and the joint interests of shareholders, the Board of Directors decided in May 2007 to introduce a policy on how to respond. In addition, regular checks are made of specific risk categories and countermeasures formulated by the Risk Management Committee in order to deal more strongly with the various constantly changing risks that enterprises

face, and a group-wide review is planned as part of these activities in fiscal 2007. The Risk Management Committee also identifies risks and determines how defensive measures can be strengthened "Seismic Intensity of 6" countermeasures begun in fiscal 2002 were completed in fiscal 2006. This involved reinforcing buildings to ensure the safety of employees within them in the event of an earthquake measuring a six on the Japanese scale of seismic intensity, and entailed a total investment of ¥1.02 billion.

## Incidence of Health Problems Caused by Asbestos (as of July 2007)

One former worker of the Hiratsuka Factory received an asbestos healthcare permit in March 2006, and he and a surviving relative were found to be eligible for workers' compensation in October 2006 and May 2007 respectively. In April 2007, a worker who used to work with asbestos at Yokohama Rubber MBK (a group member based in Fukuoka City) filed a claim and underwent a medical examination. Regarding health problems caused by asbestos, appropriate steps will continue to be taken, including the conducting of regular health investigations.

# Action on the Environment Summary of Fiscal 2006

## Environmental Management

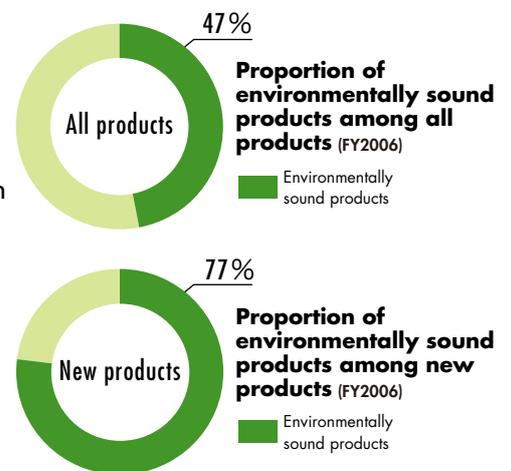
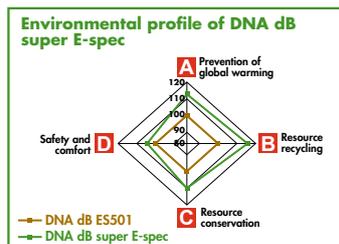
- p.14** Formulation of GD100 basic policy on the environment and GD100 guidelines for action on the environment
- p.16** Expansion of ISO14001 accreditation and certification of head office operations
- p.20** Verification of medium and long-range plans on the environment

## Development of Environmentally Sound Products

- p.22** Clear definition of environmentally sound products based on four environmental functions
- p.23** Announcement of proportion of environmentally sound products in fiscal 2006
- p.25** Development of DNA dB super E-spec passenger car tire made from 80% non-petroleum resources
- p.26** Development of new ZEN eco-brand of tires for trucks and buses

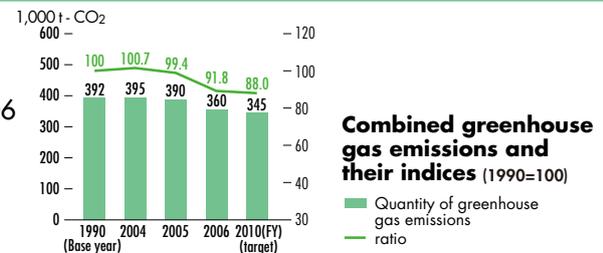


DNA dB super E-spec



## Environmentally Conscious Production

- p.32** Attainment of 8.2% cut in greenhouse gas emissions in FY2006



## Improvement of Physical Distribution

- p.34** Ascertainment of CO<sub>2</sub> emissions generated by transportation in fiscal 2006
- p.34** Distribution of Green Distribution Guidelines to business partners



Green Distribution Guidelines

## Society's View (April 2006-July 2007)

- Awarded highest environmental rating by the Development Bank of Japan (October 2006)
- Manufacturing division ranked 10th in Nikkei Inc.'s "Environmental Management Index Survey" (December 2006)
- Selected for inclusion in the SRI Index "FTSE Good Global Index" for the second year running (May 2007)
- Awarded an "A" overall rating for the "Assessment of Enterprises' Social Responsibility" by the Center of Public Resources Development (July 2007)



DBJ environmental rating mark

FTSE mark

# Review of Fiscal 2006 and Challenges in Fiscal 2007

Yasuhiro Mizumoto

Corporate Officer in charge of Environmental Conservation Dept.,  
General Manager of Tire Technical Div.

## Combating global warming is a global challenge

The Yokohama Rubber Group sees the fight against global warming as a top priority, and so is taking action to raise the level of its environmental management. Reading former Vice President Al Gore's *An Inconvenient Truth*, I was once again struck by the scale of the global environmental crisis that we face. Both the public and private sectors in countries around the world are now starting to take action, with the halving of greenhouse gas emissions by 2050 (compared with levels in 2000) being adopted as a key item on the agenda of the G8 summit held in Germany in June of this year, and the Yokohama Rubber Group, too, intends to play an active part in combating global warming.

### The Three Guiding Principles of GD100 Phase I

The Yokohama Rubber Group has made asserting world-class strengths in technologies for protecting the environment an explicit objective of its new GD100 medium-range management plan. Phase I of GD100, which covers the first three years from 2006 to 2008, puts a strong emphasis on taking our environmental management practices to the next level. To this end, three guiding principles have been adopted: adopting consistent environmental management worldwide ("global environmental management"), minimizing the environmental impact in all products ("environmentally sound products"), and recycling and elimination of industrial waste ("top-level environmental friendliness").



## Results of activities in fiscal 2006

The key developments in our activities to combat global warming in fiscal 2006 are summarized below.

### ● Production and logistics

Emissions of greenhouse gases, which are linked directly to global warming, were reduced by 8.2% compared with fiscal 1990 levels, due in considerable part to energy conversion in the form of conversion of heavy oil to natural gas at key tire plants and the introduction of cogeneration systems. On the physical distribution front, we began calculating transport energy and CO<sub>2</sub> emissions last year. This revealed that CO<sub>2</sub> emissions during transportation of tire products accounts for 80% of the total, leading to the formulation of finely-tuned countermeasures in response. The supply chain has not been neglected either, with steps being taken to strengthen collaboration with business partners in logistics and procurement.

### ● Product development

Yokohama Rubber aims to make all its products "environmentally sound" by fiscal 2017. In order to achieve this target, we first defined exactly what constitutes an "environmentally sound product." We decided to assess products quantitatively along four dimensions of environmental performance, and to call those new products that exceeded conventional products along all four dimensions as "environmentally sound products." As a result, it is now possible to state what proportion of our products is environmentally sound. The proportion of environmentally sound products in fiscal 2006 was 47% of our entire range, and 77% of all new products.

### Establishment of "Eco Award" Scheme

In order to deepen understanding of GD100 policies on the environment and to promote further action by all divisions of Yokohama Rubber and group companies, an Eco Award was launched in fiscal 2006 to provide recognition for the environment achievements and efforts of individual organizations. The winning divisions and group companies in fiscal 2006 are shown below, and the award ceremony was held on May 25, 2007.

<b>Eco Factory Award</b>	<b>Outstanding Performance Award:</b> Mishima Plant <b>Award for Effort:</b> Facility Administration Dept. Yokohama Tire Philippines, INC.
<b>Eco Office Award</b>	<b>Outstanding Performance Award:</b> No winner <b>Award for Effort:</b> Yokohama Tire Shizuoka Hanbai Co., Ltd. The Yokohama Rubber MBT Co., Ltd. Yokohama Tire Taiwan Co., Ltd.
<b>Environmentally Sound Product Award</b>	<b>Outstanding Performance Award:</b> MB Business Development Dept. <b>Award for Effort:</b> Hamatite Technical Dept. TB Tire Designing Dept. Tire Materials Development Dept.

## Challenges in fiscal 2007

In the light of environmental performance in fiscal 2006, we will be placing a particular focus on the following areas of activity in fiscal 2007.

### ● Reduction of waste emissions

Although we targeted a 35% reduction in emissions in fiscal 2008 (compared with fiscal 2006 levels), emissions in fact rose by 0.8% from a year earlier in fiscal 2006. Chastened by this setback, in fiscal 2007 we aim to cut emissions by 20% compared with fiscal 2006 by taking drastic measures to reduce emissions of waste such as product scrap.

### ● Global environmental management

Presently, nine overseas manufacturers in the Yokohama Rubber Group have acquired ISO14001 certification, which we regard as a key component of environmental management. In order to achieve consistent environmental management worldwide, however, environmental management practices on a par with those followed at Yokohama Rubber need to be introduced. For example, even in countries that are not signatories to the Kyoto Protocol, all group companies must adopt the same targets as Yokohama Rubber, and we are stepping up global action to put the necessary mechanisms in place for this to be achieved.

### Self-evaluation of Environmental Management

#### Areas of Progress in Fiscal 2006

- Reduction of greenhouse gas emissions in line with Kyoto Protocol targets
- Quantification of impact on environment of logistics operations and implementation of measures to cut CO<sub>2</sub> emissions
- Measures to reduce environmental impact along the supply chain (concerning control of chemicals, procurement, and logistics)
- Continuation of zero emissions
- Definition of environmentally sound products and quantification of proportion of environmentally sound products
- Development of environmentally sound products (launch of new tire products for passenger cars, trucks and buses)

#### Challenges for Fiscal 2007 Onward

- Reduction of industrial waste emissions
- Enhancement of global environmental management
- Disclosure of data on environmental management
- Contribution to environment and society



### ● Contribution to environment and society

The Yokohama Rubber Group's Japanese production sites and overseas producers interact with local communities in a variety of ways. The fact remains, however, that, among these activities, the activities initiated by the Yokohama Rubber Group are limited. To rectify this situation, we have decided to launch a new project, called the "YOKOHAMA Forever Forest" project, to plant trees and create woodland around our plants beginning in the present fiscal year. Through this project, we aim to not only contribute to the fight against global warming, but also to actively strengthen ties between local communities and our production sites.

The Yokohama Rubber Group aims to assert world-class strengths in technologies for protecting the environment in its centenary year in 2017, and it has adopted medium to long-range plans spanning a period of 12 years divided into four phases of three years in order to achieve this aim. This is born of recognition that activities to minimize the impact on the environment can only be effective if pursued steadily over an extended period. In fiscal 2007, we intend to clear each of the hurdles that lie in our path in accordance with these plans.

# Environmental Basic Policy and Environmental Guidelines

## Revision of Environmental Basic Policy and Environmental Guidelines to Strengthen Action

As one of the basic principles of GD100, a new medium-range management plan launched in April 2006, Yokohama Rubber adopted the goal of “asserting world-class strengths in technologies for

protecting the environment.” To put this principle into action, our Environmental Basic Policy and Environmental Guidelines have been reviewed and revised.

### GD100 Basic Policy on the Environment (revised November 2006)

Following the principle of “dealing fairly with society and valuing harmony with the environment,” we shall assert world-class strengths in technologies for protecting the environment.

#### I Continued improvement of environmental management

We shall practice environmental management as an integral part of our business activities, and undertake activities to protect the environment as a duty to society.

#### II Action to combat global warming

All employees in all divisions shall take action to combat global warming in all fields of activity.

#### III Contributing to creation of a sustainable recycling society

Action shall be taken to reduce the impact on the environment at all stages, from product planning and development to purchasing, production, sale, and disposal.

### GD100 Guidelines for Action on the Environment (revised November 2006)

For the sake of future generations and this irreplaceable planet, we shall act to protect the environment.

#### I We shall practice global environmental management.

We will adopt consistent, high-level environmental management practices at all operations worldwide.

- Environmental management systems will be developed at all consolidated subsidiaries and affiliates in Japan and overseas.
- Environmental programs will be continuously improved, and the roles of each individual working in the group will be clarified to act.

#### II We shall contribute to society through manufacturing.

We will take action to minimize the environmental impact in all products.

#### III We shall undertake “top-level environmentally conscious production” and pursue activities to protect the environment as a social duty.

Industrial waste shall be completely recycled.

- Recognizing that we have a role to play in combating global warming, we will cut emissions of greenhouse gases.
- We will strive to reduce waste emissions and improve “3R” (reduction, reuse, and recycling) technologies, and conserve and recycle resources.
- We will comply with environmental laws and regulations and observe other contractual matters, including their backgrounds.

#### IV We shall work to improve communication with society and local communities.

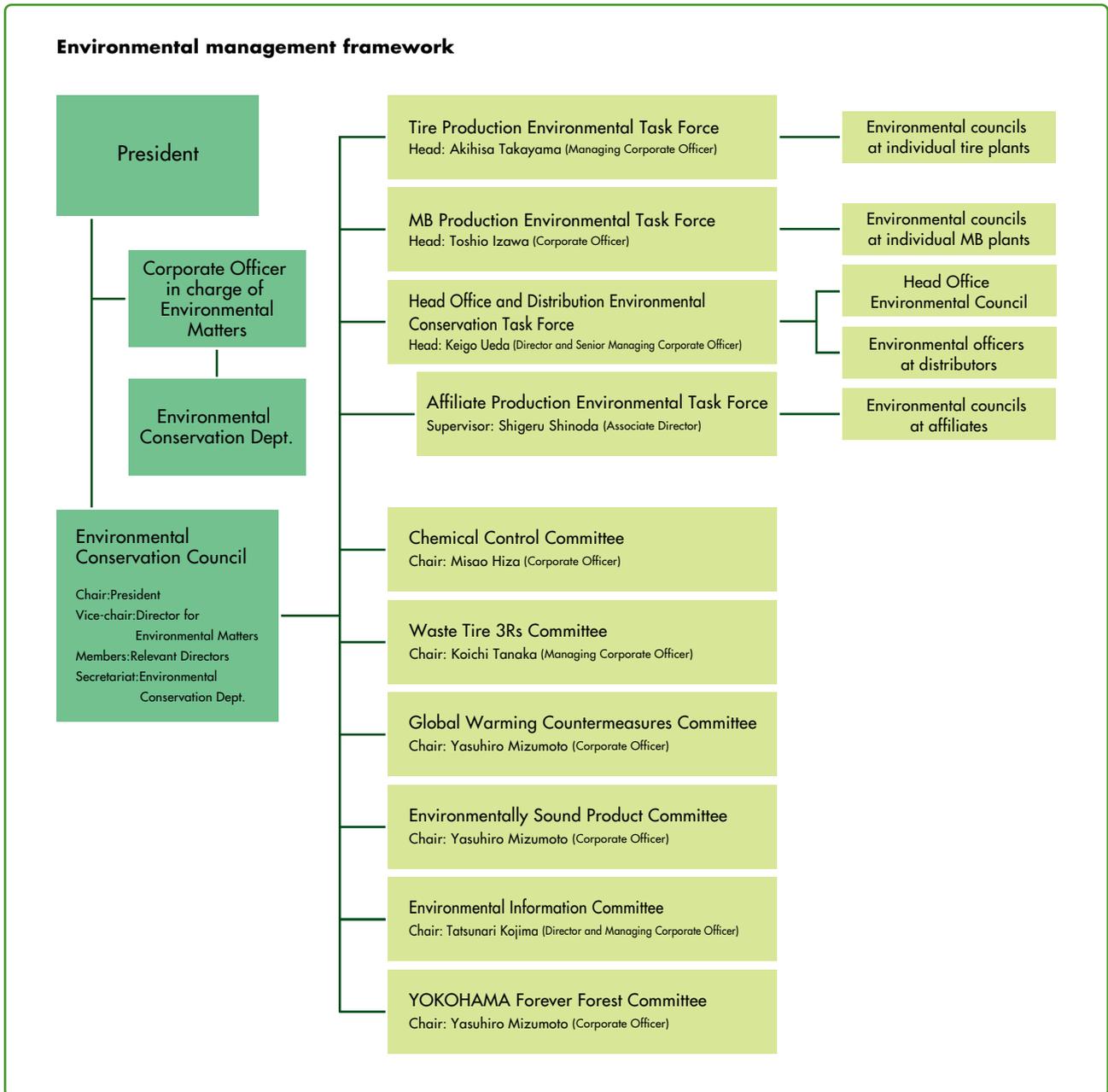
- Activities will be undertaken to gain the understanding of people within and outside the company concerning our practice of environmental management and achievements.
- Action will be pursued to take into consideration the views of everyone who plays a part in supporting the activities of the Yokohama Rubber Group.

# Environmental Management Framework

## Establishment of Environmental Information Committee to Improve Communication

Yokohama Rubber is improving and strengthening arrangements to promote environmental management. In June 2005, a framework was established that clarified responsibilities for environmental management within individual operations (the tire division, MB division, production operations of affiliated enterprises, and office operations), and in the particular areas of control of chemical substances, reduction, reuse, and recycling of waste tires (i.e., the “3Rs”), and measures to prevent global warming. This was followed in June 2006 by the establishment of the

Environmentally Sound Products Committee and the commencement of action on themes such as the definition of “environmentally sound products” and the raising of the proportion of our lineup that consists of environmentally sound products. Then in March 2007, the Environmental Information Committee was established to enable a unified, positive approach to communication activities in order to deepen understanding of our implementation of environmental management practices and their outcomes among people both within and outside the company.



# Environmental Management System

## Expansion of ISO14001 Certification of Operations

ISO14001 compliance is being promoted as a means of ensuring the adoption of consistent environmental management practices at all our operations worldwide. Between 2006 and July 2007, Yokohama Tire Corporation, Yokohama HAMATITET (Hangzhou) Co.,Ltd., head office operations, and Yokohama Tire Manufacturing (Thailand) Co., Ltd. were all certified as ISO14001 compliant. The Yokohama Rubber Group's 32 distributors, too, have introduced environmental ISO14001-compliant GD100 guidelines and have embarked on adopting

environmental management practices.

### State of ISO14001 certification (as of July 2007)

<b>Japan:</b>	Yokohama Rubber (Hiratsuka Factory, Mie Plant, Mishima Plant, Shinshiro Plant, Onomichi Plant, Ibaraki Plant, Nagano Plant, Hiratsuka East Plant, head office operations), Hamagomu Kosan, Hamagomu Engineering, Yokohama Tire East Japan Retread, Sanyo Retread
<b>Overseas:</b>	Yokohama Tire Philippines, YH America, Yokohama Rubber (Thailand), SC Kingflex, Hangzhou Yokohama Tire, Yokohama Tire Taiwan, Yokohama Tire Corporation, Yokohama Tire Manufacturing (Thailand), Yokohama HAMATITET(Hangzhou), SAS Rubber Company

## Strict Compliance with Laws and Ordinances through Implementation of ISO14001

The laws, regulations, and other contractual commitments to be observed are stipulated in accordance with ISO14001 requirements, and awareness of legal amendments and appropriate compliance are confirmed through audits. Each of our establishments constantly keeps track of the state of amendment of local ordinances,

agreements, and contracts, and adopts stricter voluntary standards. In fiscal 2006, there were no violations of laws or ordinances by any of our establishments, and "Standards on Total Zinc" were reviewed in accordance with the revised Water Pollution Control Law, confirming that levels were within the prescribed limits.

## Continuous Improvement of Environmental Management through Three Forms of Auditing

Continuous improvements to environmental performance, environmental risk, and environmental management are audited by conducting three kinds of audit: company-wide audits, external ISO inspections, and internal audits. Since fiscal 2006, overseas establishments, too, have been included within the scope of audits in order to verify the adoption of "consistent environmental management at operations worldwide."

### Company-wide Audits

These are cross-check audits conducted by the Environmental Conservation Department of sites' state of compliance with environmental legislation and internal standards on environmental management. In fiscal 2006, 12 production sites (including three overseas operations) were audited, confirming that consistent environmental management practices are followed in Japan and overseas. The results of this company-wide audit were reflected in the choice of Eco Factory Award winner for the fiscal 2006 Eco Award (an internal prize headed by the President).

### External Audits (ISO14001)

All of Yokohama Rubbers' plants underwent regular and renewal inspections conducted over a combined total of 47 days by the ISO certification body, resulting in all having their accreditation renewed.

### Internal Audits (ISO14001)

26 days of inspections were conducted at all plants in fiscal 2006 in accordance with ISO regulations.

### Reinforcement of Standards for Company-wide Audits

Auditing standards have been tightened in line with higher social demands concerning environmental management practices. In fiscal 2006, 31 nonconformities were identified, and continuous follow-up of corrective measures was undertaken. The largest category of nonconformity concerned "implementation of legal and internal regulations," which accounted for 16 instances. Failures to properly "administer systems" leading to improvements in performance were also identified.

### Trend in number of nonconformities at Hiratsuka Factory

	2003	2004	2005	2006 (FY)
Opportunities for improvement	42	47	29	39
Minor shortcomings (requiring improvement)	3	3	1	7

## Enhancement of Environmental Training and Announcement of Message from the President

In addition to incorporating environmental training into education provided to new hires, Yokohama Rubber also arranges general ISO14001 environmental training, environmental training targeting mainly engineers in their second or third year at the company ("Techno College"), and training of internal auditors. Training on a total of 109 emergency scenarios provided for under ISO14001 has also been provided to 798 employees. During Energy Conservation Month every February and Environment Month every June, a message from the President is sent out to all employees. In fiscal 2007, an appeal for environmental slogans and posters drew 2,008 and 63 entrants respectively.

### 環境月間にあたって



社長

6月は環境月間です。昨今の東京での雪の無い冬など異常気象が身近に実感され、環境保護の重要性がますます高まっています。  
 種々の環境課題の中でも、地球環境全体に影響を及ぼす地球温暖化の防止がもっとも緊急を要し、我々の日常の活動においても具体的な行動が求められています。  
 当社では、「トップレベルの環境貢献企業」を目指して行動を開始し、グローバル環境経営、環境貢献商品、環境対応生産の3つの課題分野を軸に、その達成に向け取り組んでいます。  
 当社は地球温暖化の防止活動の一環として、06年度に温室効果ガス8%強の削減を達成しましたが、GDI100の目標である12%削減の実現には、上記の3つの課題について、更なる活動推進が必要です。  
 これら環境貢献活動の基本は、個人の意識の問題に帰着します。  
 一人ひとりの室内温度・照明コントロールへの気配り、環境貢献商品を設計・開発しようという意欲、お客様に環境貢献商品を使用していただきたいとの思い、そして他人への思い遣り、が環境貢献行動の原点です。  
 この月間においては、グループで働く一人ひとりが環境課題との「関わり方」を遅延している課題に自覚するとともに、次の具体的な行動を実践してください。  
 ・チームマイナス6%運動(クールビズ・ウォームビズなどの6つのアクション)の実践  
 ・内部・外部・全社環境監査時における指摘事項の改善状況確認  
 横浜ゴムグループが環境貢献活動を通じて、地域住民から好感を持たれる工場・販売店であり続け、社会と良好な関係を築き信頼される企業として、行動しましょう。

President's message for Environment Month (June 2007)

## Response to Environmental Risk

Following a review of possible emergency scenarios at all plants, an additional 20 scenarios were added to the existing 89, bringing the total to 109. Education and training are provided to relevant parties concerning 95% of the emergency scenarios (July 2007). Regarding the remaining 5%, training is scheduled to be provided during fiscal 2007.

### Breakdown of emergency scenarios (the numbers of cases)

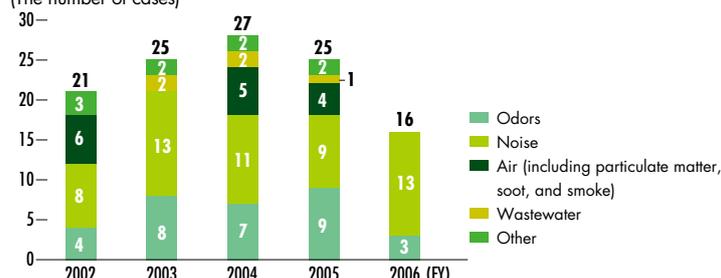
Spillages	72
Dispersal of carbon or other substances	14
Other fires or leaks	23

## Number of Complaints Concerning the Environment

The number of complaints concerning the environment in fiscal 2006 fell 26% compared with the previous year to 16. We have increased opportunities for taking on board the views of local residents, and take all feedback seriously.

### Trend in number of complaints

(The number of cases)



## Active Risk Communication with Local Communities

Local residents and employees' families are invited on tours of plant environmental facilities and exchange events. In fiscal 2006, a total of 93 local residents and 883 members of employees' families visited our plants, providing us with an invaluable opportunity to hear their views.

### Tours of environmental facilities at plants

(May 2006-May 2007)

Local residents	Hiratsuka Factory (47), Mie Plant (30), Mishima Plant (9), Shinshiro Plant (7)
Employees' families	Mie Plant (227), Mishima Plant (80), Shinshiro Plant (106), Onomichi Plant (220), Hiratsuka East Plant (8), Nagano Plant (242)

\*Figures in parentheses indicate the number of visitors.



Before (left) and after "lights out" (right) at a direct tire outlet participating in Black Illumination

## 683 Establishments Sign Up to "Black Illumination 2007"

As a member of "Team -6%," the Yokohama Rubber Group has taken part in the "Black Illumination" national campaign to combat global warming since 2006. In 2007, all domestic tire distributors and direct tire outlets, that is, a total of 683 establishments participated.

### ■ Raising the Level of Environmental Management at Distributors

We request that all our tire distributors follow environmental management practices on a par with Yokohama Rubber's own. As part of such moves, we encourage them to take part in environmental activities engaged in by Yokohama Rubber, as a result of which all operations participate in Black Illumination. So as to make



**Rintaro Kikukawa**  
 Manager of Business Management  
 Section, Tire Domestic Sales  
 Administration Dept.

people more aware that they should not simply "turn off the electricity," but rather "turn off the electricity for the sake of the environment," efforts have been made to raise environmental awareness by such means as meetings before the campaign to explain what it was all about, and distribution of posters

produced by the company itself. Distributors, too, have as a result actively encouraged outlets to take action, and in 2007 all domestic distributors and direct tire outlets took part in the campaign. Presently, active participation in local environmental events and similar activities is encouraged so as to foster proactive engagement in GD100 environmental activities.

### What is "Black Illumination"?

"Black Illumination" is a campaign launched in 2003 at the urging of the Japanese Ministry of the Environment with the aim of encouraging people to switch off electricity and in the process think more about the issue of global warming. It is undertaken during Environment Month every June; for two hours between 8 p.m. and 10 p.m. on June 24, 2007, the lights were switched off in unison at some 60,000 facilities and homes.



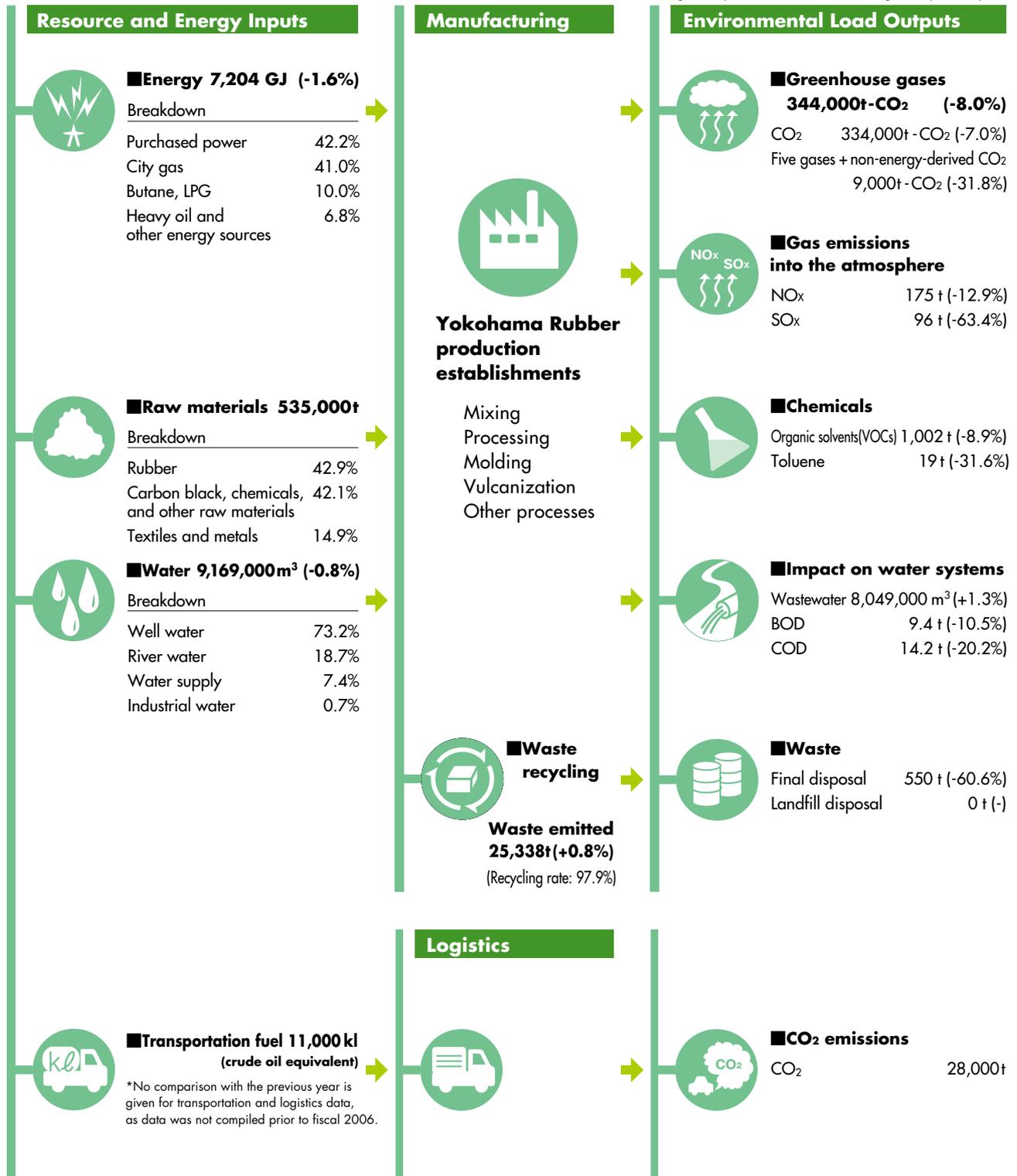
For details of participating establishments, please see our website ([http://www.yrc-pressroom.jp/env\\_en](http://www.yrc-pressroom.jp/env_en)).

# Overview of Environmental Load

By quantifying resource and energy inputs and outputs, Yokohama Rubber is finding and implementing ways of lowering its total environmental load. In fiscal 2006, we succeeded in reducing both

resource and energy inputs and environmental load outputs by improving productivity and implementing energy-saving measures, despite output over the same period increasing.

Figures in parentheses indicate the change from previous year.



# Medium to Long-range Environmental Plans

## State of Progress in FY2006

\*Assessment of state of progress: FY2006 targets achieved by the entire company are marked by a circle (○), and targets that were not achieved are marked by a cross (✕).

Challenges		FY2006	Progress*	Page in this report		
Improvement and Innovation of Environmental Management	Global environmental management	Adoption of consistent environmental management at all operations worldwide.	Domestic and foreign production operations (18 ISO14001 certified), non-production operations (34 "kick-off" centers for environmental management).	○	16	
			Familiarization of all group companies with environmental policy.	○		
	Delivery of environmentally sound products	All products to be environmentally sound products by FY2017. To spread the concept of environmentally sound products among users.	Environmentally Sound Product Committee established and commences activity.	○	22	
			Quantification of "pioneers" ⇒ quantification of definition.	○		
	Kyoto Protocol compliance	Compliance with Law Concerning the Promotion of Measures to Cope with Global Warming and amended Law Concerning the Rationalization of Energy Use.	Establishment and operation of Global Warming Countermeasures Committee. Action on establishment of new national targets and appointment of statutory energy managers throughout company.	○	32	
			Completion of measures in compliance with amended law Concerning the Rationalization of Energy Use. Development and announcement of system to calculate CO <sub>2</sub> emissions from logistics operations as a "specified shipper."	○		
	Restructuring of environmental training	Wide-ranging improvements in level of skills, technologies, knowledge, and qualifications concerning the environment.	Enhancement of education of internal auditors (179 trained in FY2006). Shakeup of Corporate Personnel Dept.'s Techno College program.	○	16	
	Development of disclosure arrangements	Enhancement of content of environmental and social reports. Appropriate calculation and disclosure of data in accordance with laws and ordinances. Disclosure of information to promote mutual understanding with local communities.	Establishment of Environmental and Social Report Editorial Committee, reorganization and expansion of the committee to Environmental Information Committee (information disclosure by 19 operations in FY2006, up eight on previous year).	○	15	
	Promotion of reduction, reuse, and recycling of waste tires	Promotion of collection of waste tires and development of "3R" technologies and products that incorporate them as a duty to society.	Establishment of Waste Tire 3Rs Promotion Committee.	○	38	
	Promotion of green procurement	Meeting of standards sought by auto industry.	Entry into effect of revised Green Procurement Guidelines.	○	36	
Contribution to environment and society	Creation of urban woodland (for relaxation, safety in emergencies, and adding to town character).	YOKOHAMA Forever Forest project.	—	52		
	Involvement in World Wide Fund for Nature (WWF).	Membership of WWF Japan (corporate member).	○	50		
Assessment of level of environmental management practices	Launch of Eco Award (promotion of environmental management practices by individual divisions).	First Eco Award ceremony held.	○	12		
Improvement of Environmental Performance	Reduction of industrial waste emissions	Target of lowering emissions to less than 50% of FY1996 level to prevent wasteful use of natural resources.	0.2% reduction from FY1996 not achieved.	✕	31	
	Zero emissions Promotion of recycling of industrial waste	Rapid attainment of target of 100% recycling of industrial waste.	Attainment of zero emissions of waste for landfill disposal.	○		
			97.9% recycling rate (target: 98.0%).	✕		
	Reduction of emissions of organic solvents (base year for organic solvents containing toluene and rubber = 2000, base year for halogen-based organic solvents = 1995)	Reduction of toluene emissions. Reduction of emission of organic solvents containing rubber.	Attainment of 91% reduction in toluene emissions compared with 2000. 49% reduction in emissions of organic solvents containing rubber compared with 2000. National target of 30% reduction already attained.	○	37	
			Reduction of emissions of trichloroethylene in aircraft products.	Development of cleaning system using substitute for trichloroethylene.		✕
			Reduction of emission of HCFC-141b in aircraft products	Development of cleaning system using substitute for HCFC-141b.		○
	Reduction of greenhouse gas emissions	Contribution to prevention of global warming in accordance with Law Concerning the Promotion of Measures to Cope with Global Warming. Contribution to prevention of global warming under amended Law Concerning the Rationalization of Energy Use.	Deployment of cogeneration systems (CGS) at domestic tire plants (Mie Plant in FY2006). Commencement of compilation and publication of data on emissions of greenhouse gases.	○	32	
			Completion of appointment of energy managers.	○		
	Improvement of logistics	Contribution to prevention of global warming under amended Law Concerning the Rationalization of Energy Use.	Commencement of compilation and disclosure of data on CO <sub>2</sub> emissions.	○	34	
	Reduction of greenhouse gas emissions from non-production operations	Energy conservation activities by distribution division. Participation in national energy conservation campaign.	Establishment of system for compiling data on greenhouse gas emissions by 45 non-production operations in Japan.	○	—	
New challenges	Preservation of water resources.					
	Maintenance and improvement of wastewater quality					
	Contribution to prevention of atmospheric pollution.					
Minimization of Environmental Risk	Arrangements for control of "substances of concern" (SOCs)	Creation of control system capable of meeting auto industry demands (REACH registration, compliance with ELV Directive, national and regional legislation, swift compliance with regulations).	Establishment of guideline structure for compliance with ELV Directive (prohibition of use of substances covered by ELV Directive and establishment of guarantee system). Development and operation of centralized system of management of SOC data on chemicals contained in products (MS-InC).	○	37	
			PRTR: Controlled based on safety impact indicator.	○		
	Control of chemicals	Asbestos: Prevention of damage to employees' health.	Comprehensive investigation of installation in buildings.	○	10	
		Atmospheric pollutants: Targets in excess of VOC standards voluntarily adopted by industry.	Compliance with Air Pollution Control Law.	○	37	
		PCBs: Proper storage and control (including amalgamated companies).	Presentation of application for prompt treatment.	○	31	
		Type I monitored chemicals: Establishment of handling of voluntarily regulated "chemicals."	Restructuring of internal control mechanisms.	○	—	
	Prevention of water and soil pollution	Coexistence with surrounding communities made top priority.	Confirmation of non-pollution by observation well method at all plants.	○	35	
	Prevention of noise and odors	Minimization of sensory nuisance.	Total of 16 complaints compared with target of 15.	✕	17	
		Promotion of mutual understanding with local communities.	Regular risk communication.	○		
	Prevention of illegal dumping of industrial waste	Monitoring of all contractors at individual production sites. Internal auditing of manifest management.	Formulation and implementation of guidelines on management of contractors. Confirmation and auditing of recycling and reuse.	○	31	



# Clear Definition of Environmentally Sound Products

## Progress in FY2006 Toward Combating Global Warming

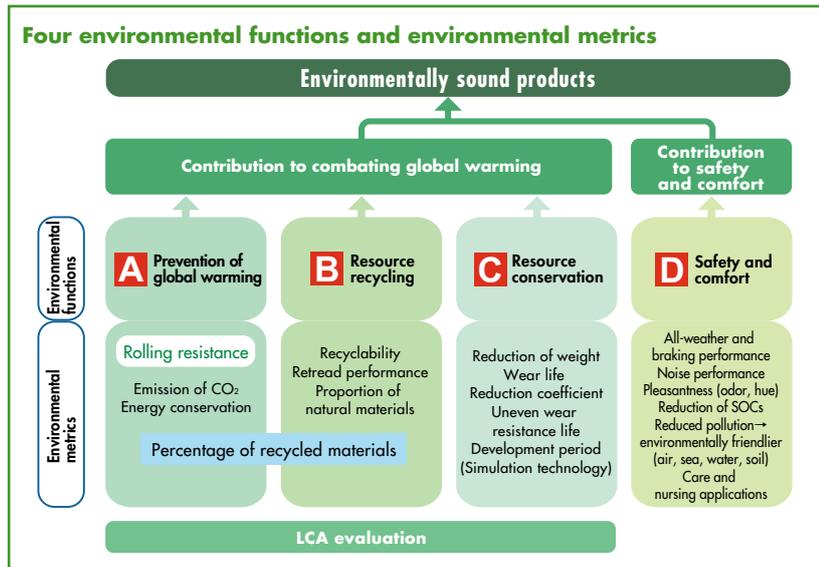
One of a manufacturer's important duties is to help fight global warming through its products. Thanks to continued action led by the Environmentally Sound Product Committee established in June 2006, Yokohama Rubber has made two major steps toward

fulfilling this duty: (1) clarification and application of the definition of environmentally sound products, and (2) calculation of the proportion of environmentally sound products in our lineup and the adoption of management by objective using the resulting figures.

## Definition of Environmentally Sound Products According to Four Environmental Functions

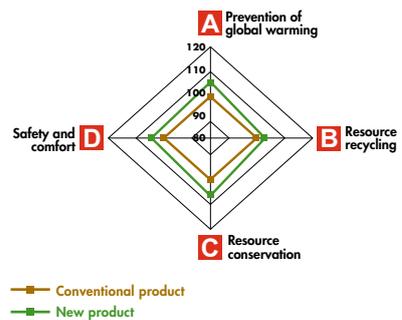
Yokohama Rubber defines environmentally sound products based on their scoring along four dimensions of environmental performance. These are: prevention of global warming, resource recycling, resource conservation, and safety and comfort. A product's environmental performance along these dimensions is

assessed based on detailed metrics calculated for each dimension. Only new products that outperform conventional products along all four dimensions and that exceed our own internal general environmental assessment standards are recognized as being environmentally sound.



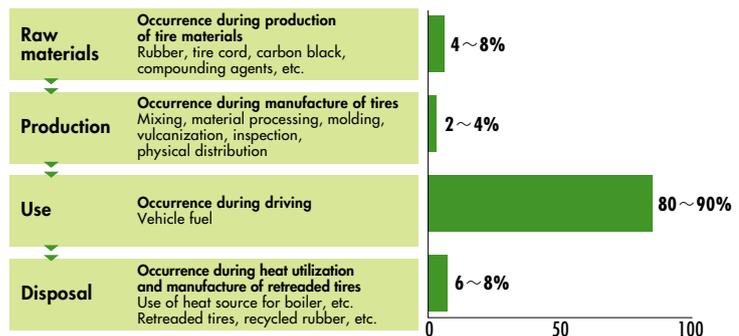
### Example of quantification of assessment of environmental functions

If a new product (1) is not inferior in any category and (2) its environmental metrics meet or exceed internal standards, it is recognized as an environmentally sound product.



### Use of Environmentally Conscious Design Applying LCA

Yokohama Rubber presently examines how environmentally friendly the designs of new products are employing a check sheet called the "Product Environmental Assessment Check Sheet," one of the key items of which is lifecycle assessment (LCA). LCA is a method of analysis using numerical data of the load on the environment at each stage of a product's life, from production to disposal. Although we have conventionally used LCA in tire design, we established the LCA measure and began using LCA for some MB products as well in 2006.



## Contributing to combating global warming through product development



**Yasuhiro Mizumoto**  
Corporate Officer in charge of Environmental Conservation Dept., General Manager of Tire Technical Div.

What might be described as Yokohama Rubber's first environmentally sound product, a pneumatic fender, appeared on the market around half a century ago in 1958. In 1998, we led the rest of the industry by launching the DNA series of eco-tires for passenger cars, which were the first line of tires designed specifically to save fuel. "Rolling resistance," which is what we used at the time as an indicator of fuel-saving performance, came to be used by the Japanese Ministry of the Environment as an indicator of tires' fuel efficiency. In July 2007, we also launched a new product in the DNA series made from 80% non-petroleum resources. Regarding tires for trucks and buses, we unveiled in March 2007 the ZEN series, featuring drastically improved fuel efficiency performance and tire life. Looking ahead, we intend to contribute to the prevention of global warming by developing products that offer outstanding environmental performance.

## Raising employees' environmental awareness through product development



**Misao Hiza**  
Corporate Officer in charge of MB Technical, General Manager of Hamatite Div., General Manager of Hamatite Technical Dept.

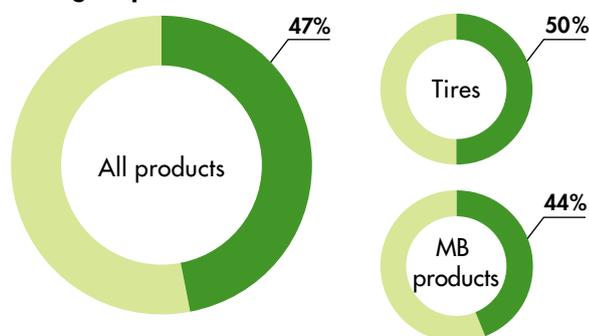
Protecting the environment means protecting oneself and one's family, so it is actually a perfectly natural thing to do. By making all of our employees aware of this and committing ourselves to environmental protection activities through our everyday work, it should be possible to achieve the goal of "asserting world-class strengths in technologies for protecting the environment" adopted in GD100. I want to help achieve such a rise in employees' awareness through product development. While MB products cover a diverse range, including industrial products, sealants and adhesives, hoses and pipes, aircraft products, golf products, and care and nursing supplies, we nevertheless managed in fiscal 2006 to complete development of methods of assessing the environmental performance of all MB products, and also introduced LCA (lifecycle assessment) of some products. We hope to extend LCA to all products as soon as possible and further accelerate the development of environmentally sound products in order to contribute to the fight against global warming.

## MBO Based on the Percentage of Environmentally Sound Products

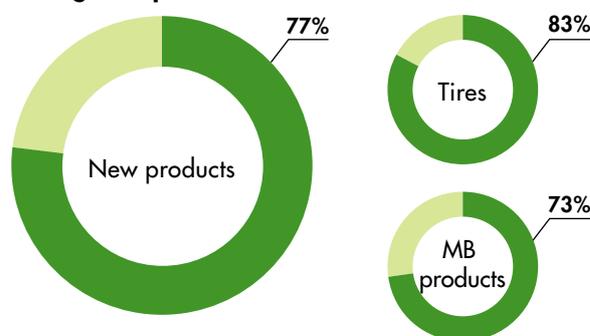
Clearly defining environmentally sound products has made it possible to calculate the proportion of environmentally sound products in our lineup. We presently calculate two percentages: one indicates the proportion of environmentally sound products among our entire lineup, and the other indicates the

proportion among new products only. By adopting management by objective (MBO) based on the proportion of environmentally sound products, we plan to achieve our goal of "making all products environmentally sound by fiscal 2017" adopted as a goal in GD100.

**Proportion of environmentally sound products among all products (FY2006)**



**Proportion of environmentally sound products among new products (FY2006)**



### FY2008 objectives

	Proportion among new products
All products	100%
Tires	100%
MB products	100%

### Environmental Labeling Based on Voluntary Standards

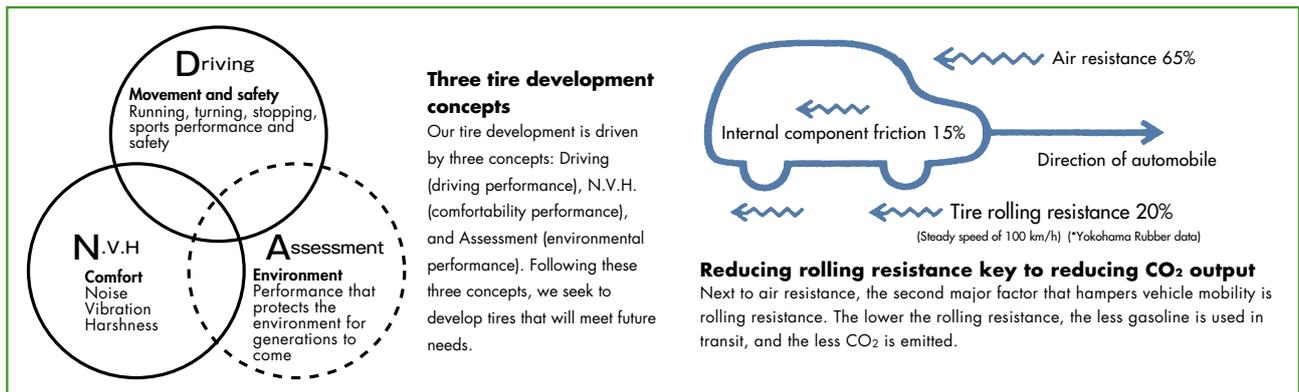
In order to convey to the customer in an easy-to-understand manner that a product has been designated "environmentally sound products" by Yokohama Rubber, we plan to develop an environmental labeling system for certifying products that clear our own voluntary standards.

# Development of Tire Products

## DNA Series of Eco-tires for Passenger Cars

Leading the rest of the industry, Yokohama Rubber launched in 1998 the DNA series of eco-tires, which offer reduced roll resistance and contribute to improved fuel efficiency of vehicles. Since then, we have continued to pursue development of new

products and improvements in quality, and now the DNA series has an excellent reputation as an environmentally sound product. Presently, the lineup consists of eight types of tires.



## Gattai-gomu™ Underpins the Improved Performance of the DNA Series

Gattai-gomu™ is a compound that offers outstanding fuel-saving performance and excellent grip, which is achieved by infusing the rubber with a stable mix of the natural mineral silica. It underwent three major evolutions—first-generation Gattai-gomu™ in 1998, second-generation

Gattai-gomu II™ in 2002, and third-generation Nano-Power Rubber in 2005—before being reborn in July 2007 as Super Nano-Power Rubber, which further boosts fuel-saving performance and is derived from non-petroleum resources.

1998 year	2001 year	2002 year	2004 year	2005 year	2007 year
<b>1st generation</b>	<b>2nd generation</b>	<b>3rd generation</b>	<b>4th generation</b>		
<b>Gattai-gomu™</b>	<b>Gattai-gomu II™</b>	<b>Nano-Power Rubber</b>	<b>Super Nano-Power Rubber</b>		
<p>9-14% reduction in rolling resistance</p>	<p>5-8% reduction in rolling resistance</p>	<p>6% reduction in rolling resistance</p>	<p>20% reduction in rolling resistance</p>		
<p>Silica-carbon compound, which is made by mixing a combination of silica and carbon into a polymer (rubber), producing a substance that combines outstanding fuel-saving performance with stronger gripping power.</p>	<p>Fuel-saving performance and grip were further improved by increasing the quantity of silica and increasing the surface area with smaller diameters. Embedding silica in the carbon additionally improved wear resistance.</p>	<p>Using nano-technology, new materials were added to Gattai-gomu II™. This improved road contact, further increasing grip performance while at the same time raising fuel-saving performance and wear resistance.</p>	<p>Compound of natural rubber with plant-derived orange oil. Orange oil makes the rubber more pliable and at the same time releases heat when braking, combining superior energy-saving performance with the sure grip of natural rubber.</p>		
<p><b>DNA ES 01-02</b> Launched November 1998</p> <p><b>DNA GP</b> Launched November 1999</p> <p><b>DNA dB</b> Launched June 2006</p> <p><b>ECOS</b> Launched January 2001</p>	<p><b>map-RV</b> Launched January 2002</p> <p><b>map-i</b> Launched March 2002</p> <p><b>dB EURO</b> Launched July 2002</p> <p><b>dB ES501</b> Launched February 2004</p>	<p><b>DNA Sdrive</b> Launched January 2005</p> <p><b>map</b> Launched February 2006</p> <p><b>map ES330</b> Launched February 2007</p>	<p><b>dB decibel</b> Launched July 2007</p> <p><b>NEW</b></p> <p><b>NEW</b></p>		

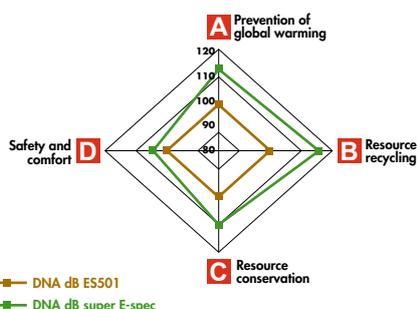
## DNA dB super E-spec Made from 80% Non-petroleum Resources

The DNA dB super E-spec tire for passenger cars announced in December 2006 is Yokohama Rubber's flagship environmentally sound product, and was developed with the aim of producing the ultimate eco-tire that contributes to the global environment in every possible way. It is made from a variety of new materials and technologies that raise environmental performance, including a new compound made using orange oil called Super Nano-Power Rubber, and offers the largest

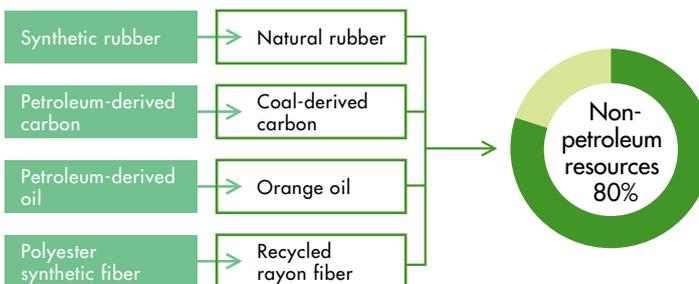
reduction in rolling resistance of any tire in the DNA series (20% less than the DNA dB ES501). The proportion of materials used to make the tire that are derived from non-petroleum resources has also been raised to 80%, contributing to conservation of limited petroleum resources. The tire went on sale in three sizes in July 2007.



### Assessment of environmental functions of DNA dB super E-spec



### Made mainly from non-petroleum resources, reducing environmental load

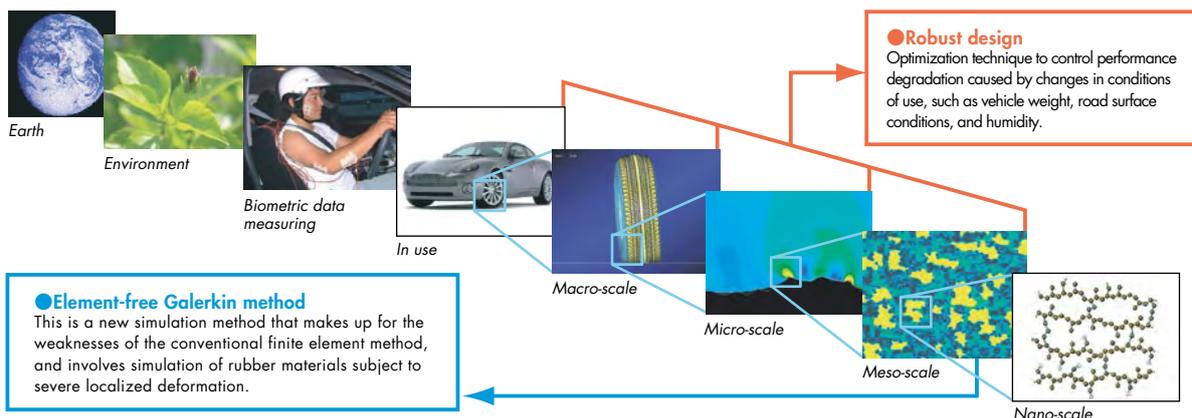


## Core Design Technologies

Yokohama Rubber employs "multi-scale simulation," a third-generation basic design technology, in tire development. This is a means of simulating tire performance across a wide range of scales—all the way from the nano-scale to the global environmental scale—to develop tires that offer better performance while at the same being

more environmentally friendly. In fiscal 2006, two new techniques were added to our design arsenal: the element-free Galerkin method, which leads to more precise material design simulation, and robust design, which increases products' market stability.

### Overview of multi-scale simulation



## Development of Tire Products

### The New ZEN Eco-brand of Tire for Trucks and Buses

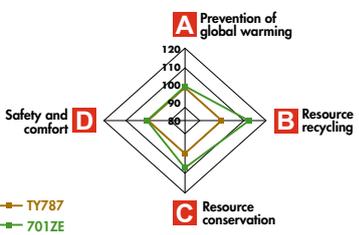
March 2007 saw the unveiling of three products under the new ZEN\* eco-brand of tires for trucks and buses. This brand was developed with three goals in mind: to allow tires to be retreaded for reuse by extending the life of the casing, to reduce tire consumption by extending tread life, and to improve fuel efficiency by reducing rolling resistance. To achieve these three goals for

environmental performance, a variety of new technologies were deployed, including "skew control profiling" and "C' roll compounding," to greatly improve durability, wear resistance, and fuel-saving performance. Progressive roll-out of eco-brand tires commenced in April 2007.

\*"ZEN" is short for "Z-environment."

**Wear resistance**  
**ZEN 701ZE all-season tire**

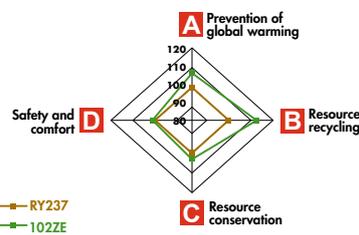
An all-season tire whose extended tread life increases tire life and saves resources due to tire consumption. 12% better wear resistance than conventional products (PRO FORCE tough TY787).

Legend: TY787 (orange line), 701ZE (green line)

**Reduced fuel consumption and maintenance**  
**ZEN 102ZE ribbed tire**

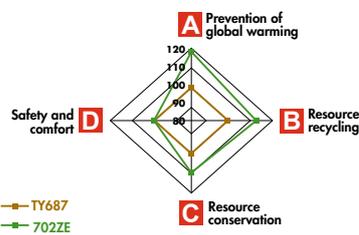
A ribbed tire whose dramatically reduced rolling resistance improves vehicle fuel efficiency, thus helping to save resources and lower exhaust emissions while at the same time reducing maintenance needs. 22% lower rolling resistance than conventional products (PRO FORCE eco RY237).

Legend: RY237 (orange line), 102ZE (green line)

**Improved fuel-saving performance**  
**ZEN 702ZE all-season tire**

An all-season tire offering improved fuel-saving performance thanks to reduced rolling resistance, and also lower maintenance due to uniform wearing. 18% lower rolling resistance than conventional products (PRO FORCE eco TY687).

Legend: TY687 (orange line), 702ZE (green line)

### Launch of Eco-tires for Trucks and Buses in 2002

The PRO FORCE eco-tire brand, the first such range for trucks and buses, was launched in 2002, and we have so far brought five products to market. Furthermore, we

unveiled the new ZEN eco-tire brand in 2007, completing our line-up to meet a wide range of user needs.

2002 year	2005 year	2007 year
<p><b>PRO FORCE (ECO) TY687</b></p>  <p>Launched October 2002</p> <p><b>PRO FORCE (ECO) TY787</b></p>  <p>Launched October 2002</p>	<p><b>PRO FORCE (ECO) RY237</b></p>  <p>Launched April 2005</p> <p><b>PRO FORCE (ECO) RY637</b></p>  <p>Launched January 2007</p> <p><b>PRO FORCE (ECO) RY637</b></p>  <p>Launched January 2007</p>	<p><b>ZEN 701ZE</b></p>  <p>Launched March 2007</p> <p><b>ZEN 102ZE</b></p>  <p>Launched March 2007</p> <p><b>ZEN 702ZE</b></p>  <p>Launched March 2007</p> <p><b>NEW</b></p> <p><b>NEW</b></p>

# Development of MB Products

## Development of Multitude of Products with Outstanding Environmental Performance

Yokohama Rubber's MB product range covers a diversity of fields, including industrial products, sealant and adhesives, hoses and coupling, aircraft products, and golf products. We have developed and sold a multitude

of products whose excellent environmental performance contributes to the fight against environmental pollution, resource conservation, and recycling.

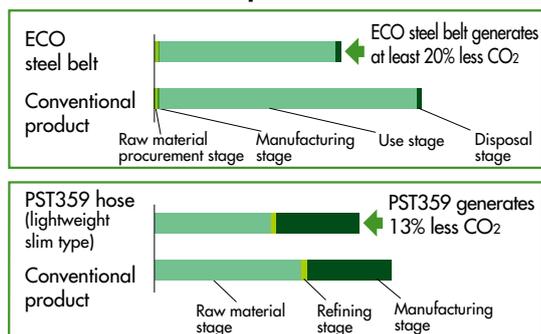
	1958	1970s	1980s	1990s	2000	2001	2002	2003	2004	2005	2006	2007
<b>Hose and coupling products</b>				<ul style="list-style-type: none"> <li>Low-permeability air-conditioning hose</li> </ul>	<ul style="list-style-type: none"> <li>Noise- and vibration-proof power-steering hose</li> <li>LEVEX lightweight high-pressure hose</li> </ul>					<ul style="list-style-type: none"> <li>Lead-free hose</li> <li>ECOFINELEX Chlorine-free hose</li> <li>Hexavalent-chrome-free hose fittings</li> <li>Hose for dimethyl ether</li> <li>Ecocute Kakin hose</li> <li>Air hose for aeration systems</li> </ul>		<ul style="list-style-type: none"> <li>ibar HG35" 35 Mpa hose for hydrogen</li> <li>Super Stream hose</li> </ul>
<b>Sealants and adhesives</b>				<ul style="list-style-type: none"> <li>ADGUARD PC-1 labor-saving 1 component epoxy resin adhesive</li> </ul>	<ul style="list-style-type: none"> <li>ECU-193 elastic flooring adhesive to counter sick house syndrome</li> </ul>		<ul style="list-style-type: none"> <li>e-can recycable container for Construction Sealants</li> <li>URBAN ROOF EU-ONE environmentally friendly urethane waterproofing agent</li> </ul>			<ul style="list-style-type: none"> <li>U300K non-solvent quick-dry primer for urethane waterproofing agent</li> <li>T-LEX non-solvent elastic adhesive for tiles</li> <li>Non-solvent WS car window sealant</li> </ul>		
<b>Marine products</b>		<ul style="list-style-type: none"> <li>Pneumatic fender</li> </ul>	<ul style="list-style-type: none"> <li>Pneumatic fender for docking at piers</li> <li>Seaflex marine hose</li> <li>Honeycomb fender</li> <li>Double carcass hose with oil leak detector</li> </ul>				<ul style="list-style-type: none"> <li>Flashing hose with solar-powered light attachment</li> </ul>		<ul style="list-style-type: none"> <li>IAMOS mooring simulation software</li> <li>Glo buoy air-filled rubber buoy</li> </ul>			
<b>Industrial equipment and aircraft products, etc.</b>					<ul style="list-style-type: none"> <li>Prepregs for aircraft</li> </ul>			<ul style="list-style-type: none"> <li>Ecotex energy-saving conveyor belt</li> </ul>				<ul style="list-style-type: none"> <li>Porous elastic road-surfacing material</li> <li>Medi-Air air cell cushion for preventing wheelchair pressure sores</li> </ul>

## Completion of Definition of Environmentally Sound Products and Commencement of LCA

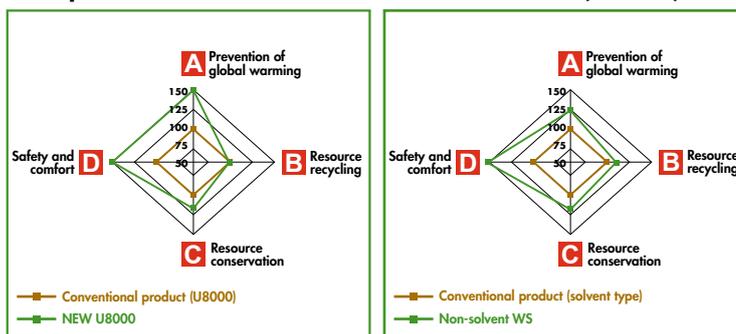
Whether tires or MB products, goods brought to market by Yokohama Rubber as "environmentally sound products" are subject to the same assessment of environmental performance. As MB products span an extremely wide range, development of environmental metrics has taken some time. By fiscal 2006, however,

we had finished work on developing methods for assessing environmental functions in each product group. Methods of LCA (lifecycle assessment) of belts and hoses were also introduced in fiscal 2006, and the intention is to develop LCA methods for assessing all our MB products as soon as possible.

### LCA of belt and hose products



### Example of assessment of environmental functions (sealant)



## As They Pound Our Roads Everyday, the Environmental Performance of Truck and Bus Tires is Especially Important

Environmental awareness is rising in the transport and bus industries, whose fuel-hungry vehicles are constantly on our roads, so in March 2007 we unveiled our new ZEN brand of eco-tire.

### ■ Achievement of World-class Fuel-saving Performance

In the six years since development of the ZEN brand began in 2001, we have achieved major improvements in durability, along with our goal of improved fuel-saving performance, resulting in improved fuel efficiency and lower exhaust emissions. Three products have been announced, one of which, the ZEN 702ZE, offers world-beating fuel-saving performance in its class.

### ■ Focus on Increasing Retreadability

Considerable resources go into making truck and bus tires, and so I have been feeling for long that increasing the number of times that they can be retreaded makes it possible to reduce tire consumption, contributing to the fight against global warming. Increasing retreadability was therefore made an explicit design goal of the ZEN brand, and in order to achieve such high retreadability, significant improvements were made to durability. To combat global warming, we aim to play our part in contributing to the spread of retreaded tires as well as increasing the useful life of new products.

*No. 1 Design Group Leader of TB Tire Designing Dept. Toshiro Oyama*



*Toshiro Oyama and the ZEN 702ZE*

## Recycling Waste Tires to Make Quieter Roads

We invest a lot of effort in "material recycling," a prime outcome of which is the development of "a porous elastic road-surfacing material" produced from rubber chips made out of scrap tires.

### ■ Reducing Noise by 90%

"The porous elastic road-surfacing material" is made by hardening ground scrap tires with urethane resin. In trials on a section of public road last year, it was found to reduce noise by around 90% compared with ordinary asphalt, and users who actually drove on the surface reported that it sounded completely different. Since then, we have received over 150 inquiries.

### ■ Laying at Ordinary Temperatures and Need for Fewer Road Repairs Contributes to Prevention of Global Warming

Unlike ordinary asphalt, our "porous elastic road-surfacing material" can be laid at ordinary temperatures. It is also expected to be more durable than conventional materials, as no flow rutting occurs under vehicle loads. Emissions of heat when the material is laid should therefore be lower, and repair work should be required less frequently, which means that exhaust emissions due to traffic congestion during surfacing and repair work will be reduced.

*Senior Engineer of MB Business Development Dept. Masato Kokusho*



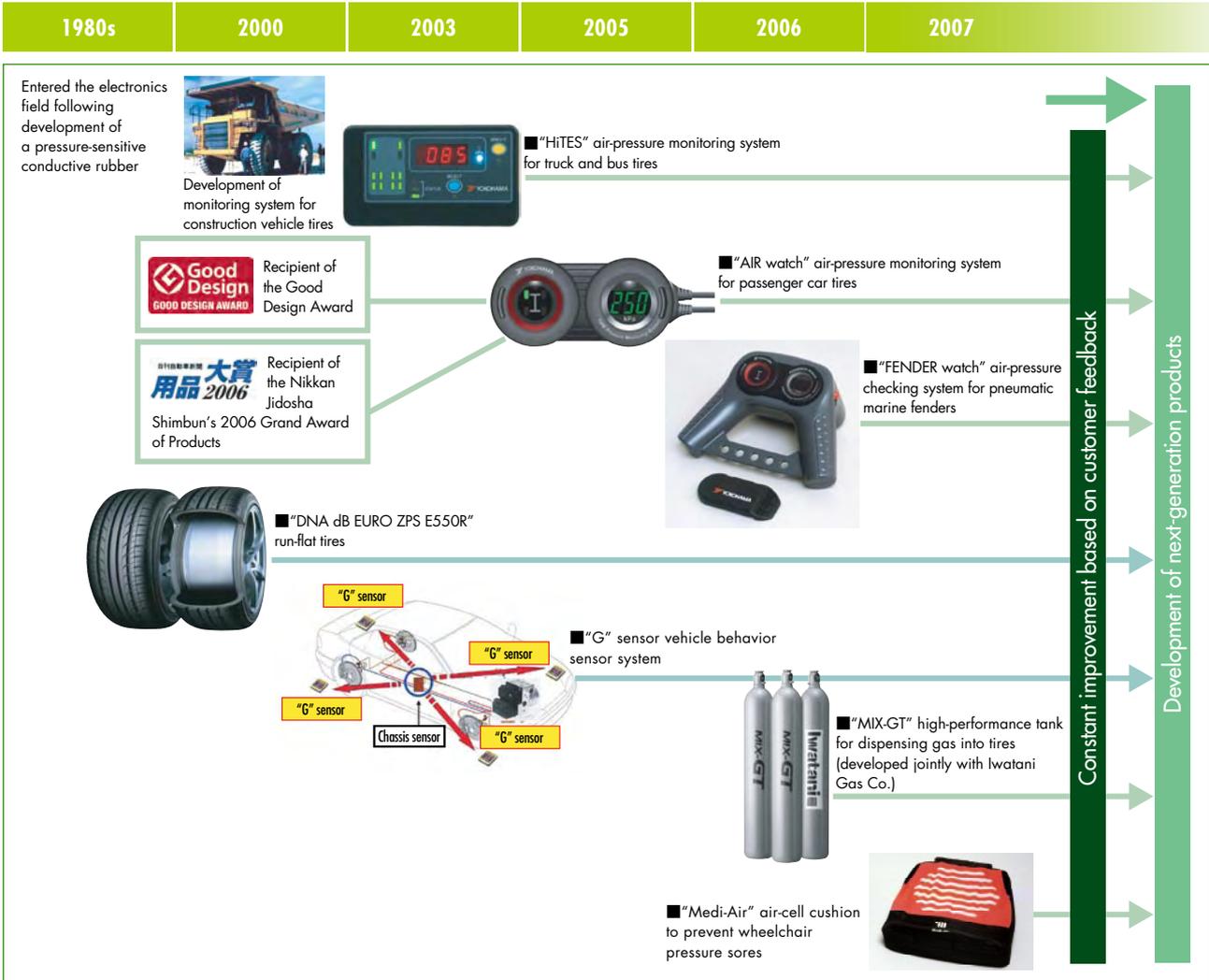
*Masato Kokusho and a section of road in front of the Zama City Office in Kanagawa surfaced with the porous elastic road-surfacing material for testing (November 2006)*

# Developing Safer, More Comfortable Products

## Development of Disability and Care-related Products Now Also Underway

Yokohama Rubber develops a multitude of products designed to make life safer and more comfortable. One such example is the air-cell cushion for wheelchair users

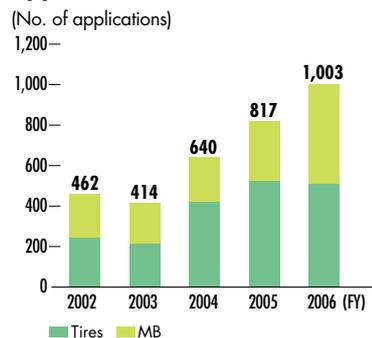
unveiled in July 2007, which is designed to prevent pressure sores, and we have also begun development of other disability and care-related products.



### Intellectual Property Situation

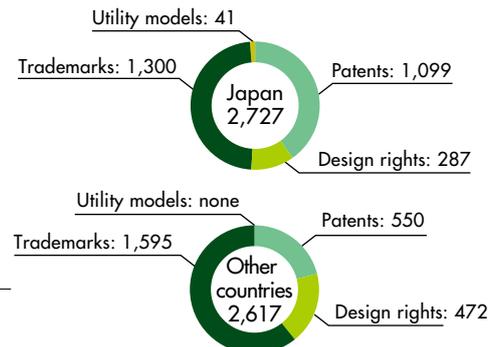
Led by the Intellectual Property Department, individual divisions work with research and analysis specialist Yokohama Techno Research to protect Yokohama Rubber's intellectual property. In 2006, the number of published applications for patents was 1,003 (513 by the Tire Group and 490 by the MB Group), and the number of patent registrations was 261. The total number of intellectual property rights held is 2,727 in Japan, and 2,617 overseas.

### Number of published patent applications



### Number of IP rights held

(as of March 31, 2007)



# Working to Dramatically Reduce Environmental Load

## Clarification of Executive Responsibilities in Tire and MB Groups Respectively

The bulk of the resources and energy used and SOCs emitted by Yokohama Rubber are associated with production. Recognizing, therefore, the particular importance of minimizing the environmental impact of our production activities (i.e., practicing environmentally conscious production), Production Environmental Task Forces have been established in the Tire Group and the MB Group to provide a framework for executive responsibility in each of these groups. The lines of

business and production methods of the two groups differ considerably. The Tire Group manufactures tires and related products using large quantities of thermal energy and water, while the MB Group manufactures a diversity of products spanning a range of fields, including adhesives, aircraft products, and golf products, necessitating that environmental measures be finely tuned according to the type of product concerned.

## Primary Concerns are Improved Energy Efficiency in the Tire Group and Reduced Industrial Waste Emissions in the MB Group

In fiscal 2006, Yokohama Rubber managed to reduce emissions of greenhouse gases by 8.2%. Emissions of industrial waste, on the other hand, rose 0.8% from the

previous year. In recognition of this, the Tire and MB Groups will be taking action following the principles outlined below in fiscal 2007.

### Saving energy by eliminating wasteful use of resources

Akihisa Takayama  
*Managing Corporate Officer,  
General Manager of Tire Production Div.*

### Production wastage to be cut to less than 1% in fiscal 2007

Toshio Izawa  
*Corporate Officer in charge of MB Production,  
General Manager of Hoses and Coupling Div.*

#### Tire Group

The Tire Group's activities are guided by the principle of "everyone working together to build an environmentally friendly, rewarding workplace of which to be proud." The key priority in fiscal 2006 was making radical improvements regarding energy sources, and this we achieved as a result of switching fuels at three of our main domestic tire plants and completing deployment of cogeneration systems. From this fiscal year, we will be pursuing drastic improvements in energy efficiency. By taking sweeping action to get rid of waste and inefficiency so as to eliminate movement, transport, and shutdown loss, shedding light on and improving energy efficiency mechanisms from logical and theoretical angles, and raising awareness of energy-saving activities in the workplace in order to maximize energy efficiency, we plan to achieve a 10% reduction in greenhouse gas emissions in fiscal 2008 compared with fiscal 1990. We will also be taking action to reduce emissions of industrial waste and achieve a 100% recycling rate to the next level, and at the same implementing measures to reduce the impact of noise, odor, and particulate matter emissions on the environments around plants.



Akihisa Takayama (left) and Toshio Izawa

#### MB Group

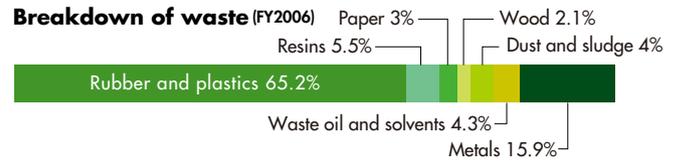
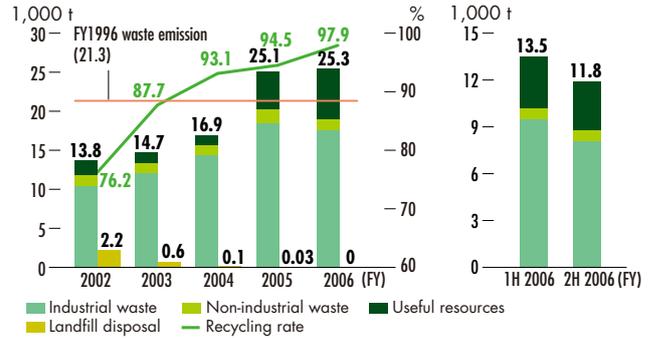
The MB Group is targeting a 13.1% reduction in emissions of industrial waste in fiscal 2007 compared with the previous year. Although in fiscal 2006 some individual divisions achieved cuts, a 10% rise in output rose in Hoses & Couplings and Industrial Products meant that the group was unfortunately unable to achieve its overall objective. Output is continuing to grow by around the same rate in fiscal 2007, too, but by stepping up action on the MB-Pi Initiative to innovate in production, we aim to lower production wastage (from spoilage and cutoffs, etc.) to no more than 1%. Technology and production divisions will collaborate on comprehensive action, such as full participation in 2S activities, reinforcement of fundamentals such as independent maintenance of facilities, practical research on resolving on-site problems with the materials available on the spot, and development of manufacturing techniques to drastically minimize production wastage. Effective use of resources to combat global warming is a key priority, and reducing product wastage has a key role to play in this.

# Reduction of Industrial Waste

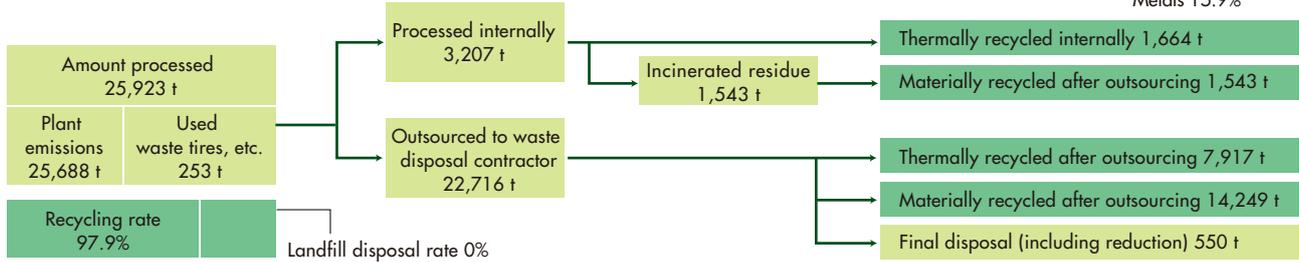
## 12.3% Reduction from Previous Six Months in Second Half of Fiscal 2006, and Drastic Reduction Planned in Fiscal 2007

Emissions of waste<sup>1</sup> in fiscal 2006 rose 0.8% from a year earlier to 25,338 tons. Compared with the 13,497 tons emitted in the first half of the year, however, emissions fell 12.3% to 11,841 tons in the second half, and in fiscal 2007, we plan to drastically reduce emissions of product wastage with the aim of cutting emissions by 20% compared with their level in fiscal 2006 in order to achieve the Phase I target of a 35% reduction by the end of fiscal 2008 compared with fiscal 1996. The recycling rate, meanwhile, was raised from 94.5% in the previous fiscal year to 97.9%. Our target in fiscal 2007 is 99%.

Waste emission, landfill disposal, and recycling rate



Waste processing flow (FY2006)



## Continuation of Zero Emissions

Since the end of March 2006, we have continued to emit zero waste<sup>2</sup> at eight of our production sites in Japan.

## Toward Total Recycling of Industrial Waste

In line with the principle declared in GD100 of pursuing world-class environmental action at our operations, we aim to be recycling all our industrial waste<sup>3</sup> by the end of 2010. To this end, we are working to expand recycling by contracting chemical producers to recycle sulfur that is no longer required back into raw materials. The 2.1% of industrial waste that could not be recycled in fiscal 2006 consisted of waste solvents, which are hard to recycle, and small quantities of unsortable waste. Using our network of internal and external contacts, we are examining possible recyclers of solvents, while the idea of re-sorting small quantities of waste for recycling is also being pursued.

## Auditing of All Industrial Waste Disposal Contractors

In order to prevent illegal dumping and also to confirm that waste is being properly processed by waste disposal contractors, audits are conducted in accordance with internal guidelines. In fiscal 2006, all contractors were audited (compared with 51% in fiscal 2005). In fiscal 2007, audits of contractors hired by more than one plant will be shared to improve efficiency. To further improve the level of control, internal guidelines on preliminary investigation of new contractors were also strengthened in fiscal 2006.

## Proper Control of PCB Waste

By March 2006, early registration of 189 items of PCB waste from transformers and condensers was completed. These will be subject to proper management and storage in accordance with legislation and company regulations until processing commences.

1. The definition of 'waste': Unwanted substances emitted during production activity, including industrial waste, non-industrial waste, and useful resources.  
 2. The definition of 'zero emissions': Zero emission of waste that is destined directly for landfill disposal.  
 3. The definition of 'total recycling': Zero emission of waste for final disposal (waste destined directly for landfill disposal and incinerated waste that is not effectively utilized).

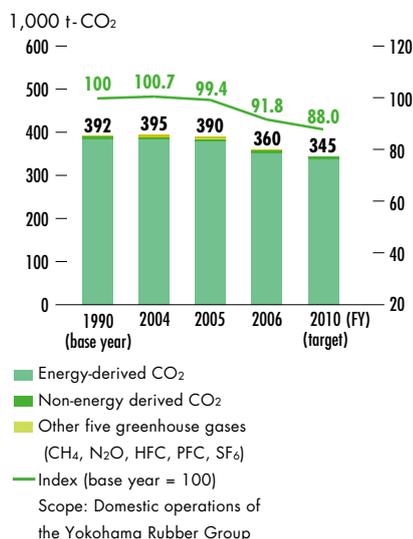
# Reduction of Greenhouse Gas Emissions

## 8.2% Reduction in Emissions, Exceeding the Target Set by the Kyoto Protocol

Greenhouse gas emissions by the Yokohama Rubber Group's domestic operations shrank 8.2% in fiscal 2006 compared with the base year, exceeding the target of a 6% reduction set for Japan under the Kyoto Protocol. A major contributor to this was the completion of a gas-powered cogeneration system (with a total efficiency of at least 85%) at the Shinshiro Plant in January 2007. As a result of these activities, the Mishima Plant became

in May 2007 the first recipient in the tire industry of the Environmental Conservation Encouragement Award at the Japan Cogeneration Center Awards. The Hiratsuka East Plant in addition finished introducing substitutes for PFCs, which have a high CO<sub>2</sub> equivalent coefficient, in September 2006. Looking ahead, we intend to work on improving "e/t" specific energy consumption.

### Combined greenhouse gas emissions and their indices (1990 = 100)



### Breakdown of greenhouse gases (FY2006)

Greenhouse gas type	Emission (1,000 t-CO <sub>2</sub> )	Percentage of total
Energy-derived CO <sub>2</sub>	351	97.4
Non-energy-derived CO <sub>2</sub>	5	1.3
CH <sub>4</sub>	0.02	0.0
N <sub>2</sub> O	0.3	0.1
HFC	0	-
PFC	4	1.2
SF <sub>6</sub>	0	-

#### Calculation methods

Data up to FY2005 were calculated in accordance with *Guidelines on Calculation of Greenhouse Gas Emissions from Business Establishments* (Ministry of the Environment). In FY2006, data were calculated by methods provided by the system for calculation, reporting, and publication of greenhouse gas emissions in accordance with the law on concerning the promotion of measures to cope with global warming.

Purchased power carbon dioxide emission factor (kg-CO<sub>2</sub>/kWh): The coefficient for FY1990 (0.424) is from *Summary Findings of a Study of Calculation of Greenhouse Gas Emissions* (Ministry of the Environment, August 2002); the coefficients for FY2004 (0.421) and FY2005 (0.425) are averages for all power sources on the user side (*Environmental Action Plans in the Electricity Industry*, Federation of Electric Power Companies of Japan, September 2006); and the coefficient for FY2006 is from *Ministerial Ordinance on Calculation of Emissions of Greenhouse Gases in Association with the Business Activities of Specified Emitters* (Ministry of Economy, Trade and Industry/Ministry of the Environment Ordinance No. 3).

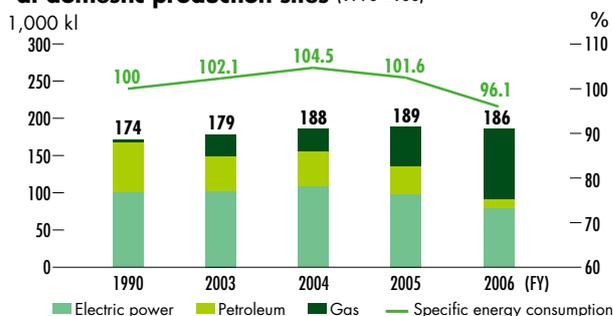
Base year: The base year is 1990 for all substances except HFCs, PFCs and SF<sub>6</sub>, for which 1995 is adopted as the base year in accordance with the Kyoto Protocol.

Calculations of emissions by group companies include estimates, and greenhouse gas emissions in past years are corrected in accordance with revisions to the estimation methods. Note that the impact of these changes is minor.

## Enhanced Energy Management to Reduce CO<sub>2</sub> Emissions

As energy-derived CO<sub>2</sub> accounted for 97.3% of total emissions at Yokohama Rubber's eight production sites in Japan in fiscal 2006, we are pursuing management of "CO<sub>2</sub>/e" and "e/t" in accordance with a formula for energy management. Regarding "e/t" in particular, we are expanding visualization as a means of maintaining strict control of, for example, cumulative energy savings and increases in energy use due to the installation of equipment and facilities unrelated to production. Specific energy consumption in fiscal 2006 was improved by 5.5% from the previous year. MBO at non-production sites is also practiced.

### Energy use and specific energy consumption at domestic production sites (1990 = 100)



#### Energy management formula (CO<sub>2</sub> = [CO<sub>2</sub>/e] × [e/t] × [t])

[CO<sub>2</sub>/e]: CO<sub>2</sub> emission factor in energy supply. Improved by fuel conversion (gasification) and use of natural energy.

[e/t]: Specific energy consumption. Improved by energy-saving activities and increases in productivity.

[t]: Output. Warehouse-in rubber equivalent in the case of Yokohama Rubber.

Energy use is crude oil equivalent according to the Law Concerning the Rationalization of Energy Use.



General Manager Toshihiko Suzuki (left) and Deputy General Manager Kenji Teraoka in front of the cogeneration system at the Shinshiro Plant, which boasts a total efficiency of at least 85%

## Installation of High-efficiency Cogeneration System

We are pursuing the deployment of high-efficiency cogeneration systems, which drastically reduce emissions of greenhouse gases, to curb the increase in the environmental load that accompanies increases in production capacity.

### ■ Focus on Drastic Cuts in Greenhouse Gas Emissions

The primary focus since the introduction of the first cogeneration system (CGS) at the Hiratsuka Factory in 1998 has been drastically reducing emissions of greenhouse gases. At the time, heavy oil was the main type of fuel used for CGS. Swimming against the stream, however, Yokohama Rubber chose to use more costly natural gas. 1998 was the year that we really began to pursue becoming a green company, as reflected by the launch of the DNA series, the industry's first eco-tire. There must not have been any compromise.

### ■ CGS Installed at Three Sites Since 2005

Detailed data on the Hiratsuka Factory system's operation and management have been compiled and analyzed since its installation, and high-efficiency systems that are among the most advanced in Japan have been introduced at our plants in Mishima, Mie, and Shinshiro since 2005, when the Kyoto Protocol came into effect. As a result, we have achieved an 8.2% reduction in emissions, exceeding the -6% target set for Japan by the Kyoto Protocol.

### ■ Raising Employee Awareness through Total Productive Maintenance Activities (TPM)

Even small air leaks can seriously hamper system efficiency. In order to maximize system performance, therefore, a strong awareness of the environment among those responsible for managing and operating equipment is essential. Adopting as our watchword "top-level systems are maintained by top-level awareness among employees," total productive maintenance (TPM) is practiced with the involvement of all employees, and steps are being taken to raise employee awareness.

Kenji Teraoka

Deputy General Manager of the Shinshiro Plant  
(formerly General Manager of the Facilities Administration Dept.)

### What are Cogeneration Systems?

Cogeneration systems (CGS) are energy-saving systems that use fuel to generate electricity, and simultaneously utilize the resulting waste heat for uses such as air conditioning or generating hot water and steam. Major reductions in energy use and CO<sub>2</sub> emissions have been achieved by effectively utilizing the waste heat recovered. The CGS installed by Yokohama Rubber achieves a high total efficiency of at least 85% by using waste heat for a steam absorption chiller and reheat boiler.

# Initiatives to Reduce CO<sub>2</sub> Emissions from Logistics Operations

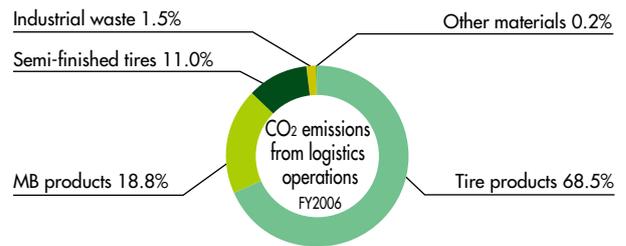
## Annual Year-on-year 1% Reduction in CO<sub>2</sub> Emission Factor Targeted

In fiscal 2006, we began compiling data on energy use and CO<sub>2</sub> emissions in transportation, and found as a result that total transportation ton-kilometers came to 231,950,000 and CO<sub>2</sub> emissions to 28,000 tons.

### Energy use and CO<sub>2</sub> emissions from logistics operations (FY2006)

Total transportation volume (10,000t-km)	23,195
Energy use (crude oil equivalent: kl)	11
CO <sub>2</sub> emissions (1,000t-CO <sub>2</sub> )	28
Weight transported (1,000 t)	1,185
Specific energy consumption (l/t)	9.1
CO <sub>2</sub> emission factor (kg-CO <sub>2</sub> /t)	23.8

Adopting as our target an annual 1% reduction in the CO<sub>2</sub> emission factor (kg-CO<sub>2</sub>/ton = CO<sub>2</sub> emissions/weight transported) compared with the previous year, we are working to achieve improvements in logistics.



## Deepening Cuts in CO<sub>2</sub> Emissions from Logistics Operations

In order to reduce CO<sub>2</sub> emissions from logistics operations, we are pursuing the following ongoing measures.

### Promotion of Modal Shift

#### Marine Transport

53% of shipments by weight from the Mie, Mishima, and Shinshiro Plants to Hokkaido, Miyagi, and Fukuoka Prefectures were transported by ferry services in fiscal 2006.

#### Rail Transport

In fiscal 2007, the Onomichi Plant began using JR container services for shipments to Hokkaido.

### Increased Use of Fuel-efficient and Low-emission Vehicles

Freight companies are urged to use fuel-efficient vehicles, and use of freight companies that employ such vehicles is being expanded.

### Centralized Consolidated Shipment

Loading ratios are being increased and the number of truck loads reduced through centralized consolidated shipment of cargoes between the three hose and coupling plants.

### Improvement of Loading Efficiency through Use of Higher Tonnage, Low-bed Trucks

In order to increase loading efficiency and reduce shipping frequency, freight companies are requested to use higher tonnage, low-bed trucks. The proportion of such vehicles used in the second half of fiscal 2006 was 33%, and we aim to achieve a further 3% improvement in fiscal 2007.

### Elimination of Intra-plant Transport

At the Shinshiro Plant, supplies used to have to be transported from the secondary plant to the main plant due to the secondary plant's lack of warehousing space. By constructing a warehouse at the secondary plant, we plan to cut CO<sub>2</sub> emissions by 2.4 tons per month from January 2008.

### Increased Direct Delivery ("disintermediation")

We are expanding direct delivery from our plants to retailers. In fiscal 2006, increases in direct deliveries were made at the Mie and Mishima Plants.

### Reduction of Industrial Waste

We aim to cut the amount of industrial waste transported by 20% from the previous fiscal year.

## Distribution of Green Procurement Guidelines to Enhance Coordination with Business Partners

In February 2007, in order to further cut CO<sub>2</sub> emissions by enhancing coordination with our business partners, we distributed Green Procurement Guidelines to 312 logistics providers with which we do business. These guidelines include specific requirements of our partners, including acquisition of ISO14001 certification, avoidance of empty mileage, and reduction of use of packing and packaging materials.

### Main content

Cooperation requests made of our partners: acquisition of external ISO14001 certification, avoidance of empty mileage, reduction of use of packing and packaging materials, use of low-emission vehicles, etc.

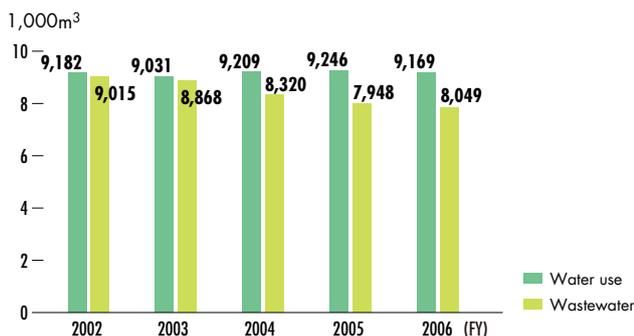


Green Procurement Guidelines

# Protection of Water, Air, and Soil Environments

## Reduction of Water Use through Increased Recycling

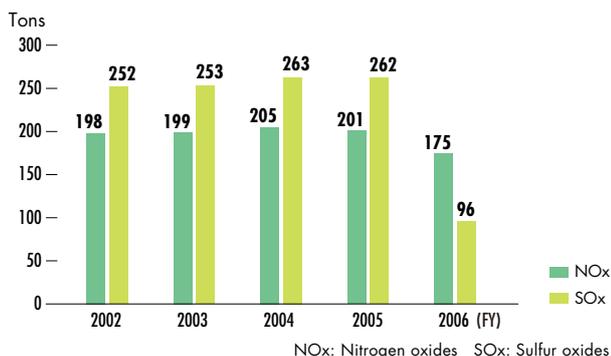
Water use kept down to the 9,100,000 m<sup>3</sup> ton mark despite increased output



The data on wastewater includes estimates, as some establishments were not equipped with flowmeters during the period concerned.

## Significant Reduction in NO<sub>x</sub> and SO<sub>x</sub> Emissions

The substitution of natural gas for heavy oil and activities to save energy yielded a steep 12.9% reduction in NO<sub>x</sub> and 63.4% reduction in SO<sub>x</sub> emissions in fiscal 2006 compared with the previous year.



## Measures against Dioxins

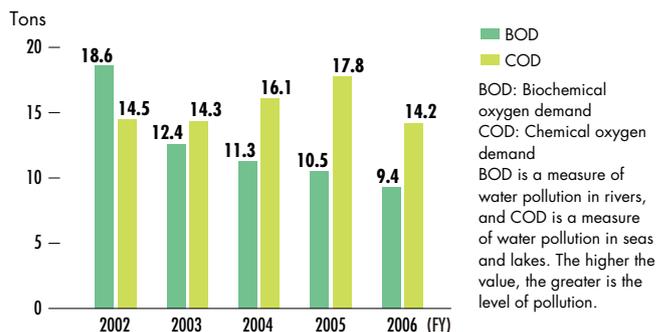
The concentration of dioxins is measured regularly once a year at the Mie Plant, which is equipped with a waste incinerator, and is within regulatory limits.

### Dioxin measurements at Mie Plant (FY2006)

Category	regulatory value	measured value
Exhaust gas (ng-TEQ/m <sup>3</sup> N)	10	0.00047
Wastewater (pg-TEQ/L)	10	0.0021
Incinerated residue (ng-TEQ/g)	3	0.0000031
Fly ash (ng-TEQ/g)	3	0.19

## Improvement in Both BOD and COD Loads

The following year-on-year improvements in the BOD and COD loads were achieved in fiscal 2006.



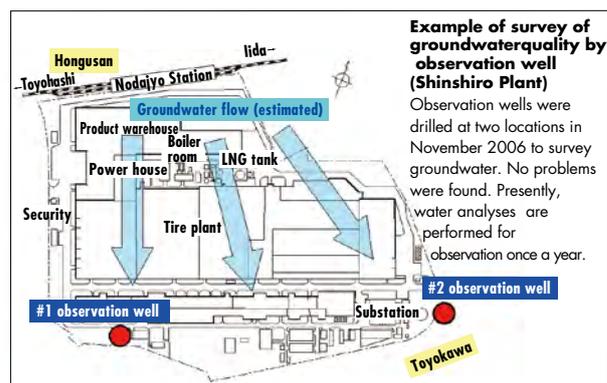
Corrections are made to the BOD and COD loads in past years due to some establishments not having been equipped with wastewater flowmeters during these periods. The effect of these changes is minimal.

## Measures against Distinctive Smell of Rubber

As a result of employing less odorous materials and sealing facilities, the number of complaints about odors declined from nine in fiscal 2005 to three in fiscal 2006.

## All Production Sites in Japan Clear Soil Pollution Law Requirements

In fiscal 2006, use of shallow observation wells was expanded to seven sites (at the Nagano Plant, where the water vein is deep underground, direct soil analysis is employed). It was confirmed as a result that all production sites in Japan are within the limits for hazardous substances laid down by the Soil Pollution Law. At the Hiratsuka Factory, where the concentration of chlorinated organic solvents in groundwater used to exceed limits, aerated cleaning is still employed.



# Reinforcement and Rigorous Implementation of Green Procurement

## Strict Implementation of Green Implementation Guidelines for Sound Operation

### Green Procurement Principles

**Procurement of safe, clean, and environmentally friendly raw materials, parts, and packaging, etc.**

1. The state of adoption and implementation of environmental management systems by suppliers shall be used as one criterion when purchasing supplies.

2. Rigorous implementation of measures to avoid use of SOCs shall be sought.

3. Purchase of environmentally friendly supplies ("green procurement") shall be promoted.

4. Emissions of industrial waste shall be reduced.

### Amendment of Green Procurement Guidelines

In order to enhance coordination with our suppliers, we have revised our "Green Procurement Guidelines." The new guidelines expand coverage to include equipment supplies and facilities, as well as parts, raw materials, essential materials, and outsourced supplies.

### Application of Green Procurement Guidelines

Suppliers are requested to follow the guidelines in the following areas.

- (1) Development of environmental management system (EMS). Suppliers that have not yet to obtain external accreditation, such as ISO14001 certification, undergo ongoing evaluations based on the results of an environmental questionnaire that is returned by suppliers to determine what actions they are taking to protect the environment.
- (2) When supplies are procured, suppliers are requested to submit a written declaration regarding the absence of substances

that are prohibited or controlled under Yokohama Rubber's "Guidelines on Prohibited and Controlled Chemicals," substances prohibited by the ELV Directive,<sup>1</sup> and substances prohibited by the RoHS Directive,<sup>2</sup> together with a report on the types and quantities of chemicals that they contain. Suppliers are also requested to develop mechanisms for managing SOCs, and are asked to submit self-assessed control check sheets.

- 1. ELV Directive: The EU End-of-Life Directive, which provides for recycling of end-of-life vehicles and controls use of hazardous substances.
- 2. RoHS Directive: The EU Restriction of Hazardous Substances Directive, which controls use of hazardous substances in electrical and electronics equipment.

(3) Suppliers are requested to be lifecycle assessment (LCA) compliant, which is a key component of Yokohama Rubber's environmentally friendly design process. In the future, they will also be requested to submit data on the manufacturing environment (such as data on electricity usage during manufacturing) for newly procured products and products whose specifications are amended.

## Supply Chain Measures

### Green Procurement Briefings

Briefings are held for suppliers to explain the revised Green Procurement Guidelines. At these, we explain the Yokohama Rubber Group's thinking on green procurement and ask for their cooperation in related surveys.



A scene from a green procurement briefing

### Surveys of Suppliers Regarding Prohibited and Controlled Substances

Surveys are made of suppliers concerning substances that are prohibited or controlled under Yokohama Rubber's "Guidelines on Prohibited and Controlled Chemicals" and substances whose use is prohibited by the ELV and RoHS Directives. As of June 2007, approximately 2,800 items of data for raw material certification had been registered.

### Reduction of Use of Packaging of Raw Materials

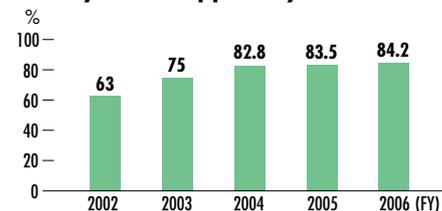
By switching from use of wooden to steel pallets used for transportation of raw materials, we cut emissions of waste by 15.6 tons in fiscal 2006.

## Promotion of Green Purchasing

### Purchase of Environmentally Friendly Office Supplies and Vehicles

Purchases of environmentally friendly office supplies accounted for 84.4% of the total in terms of value, and purchases of fuel-efficient and low-emission domestically-made test vehicles made up 94% of the total value of purchases.

Proportion of purchases of environmentally friendly office supplies by value



# Enhanced Chemicals Management

## Chemicals Management System

The Yokohama Rubber Group is strengthening arrangements for management of chemicals. Measures include the establishment in 2005 of the Chemicals Control Committee, the ensuring of proper abidance by the law, and the appropriate management of chemicals and communication of data on chemicals along the supply chain. Existing chemicals are managed primarily using MSDS, and voluntary activities to reduce use of PRTR substances are being pursued within the group.

## REACH Subcommittee Gets Down to Business

In order to strengthen compliance with REACH,<sup>1</sup> which has applied to products destined for Europe since June 2007, the REACH Subcommittee was established under the Chemicals Control Committee to begin looking into concrete measures, such as development of a database.

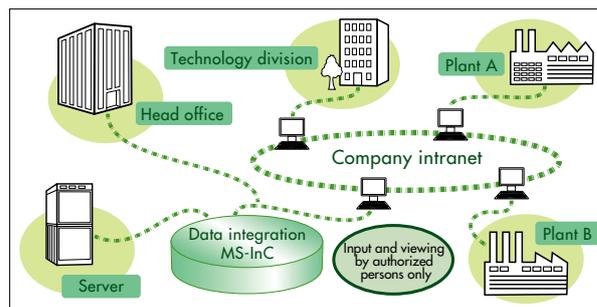
1. REACH: The Registration, Evaluation, Authorization and Restriction of Chemicals regulation of the EU.

## Launch of MS-InC-based Database Administration

Suppliers and supplies along the supply chain are surveyed to keep track of the presence, and quantity where present, of SOCs such as lead and cadmium in purchases of raw materials. The data obtained are centrally managed using the MS-InC system developed in-house by Yokohama Rubber. This system allows information to be shared by head office, design and development technology divisions, and all of the 8 plants in Japan.

\*MS-InC is an acronym derived from the underlined letters in "Material Management System Information of Chemicals."

### MS-InC in outline



## Reduction of Use of PRTR Chemicals

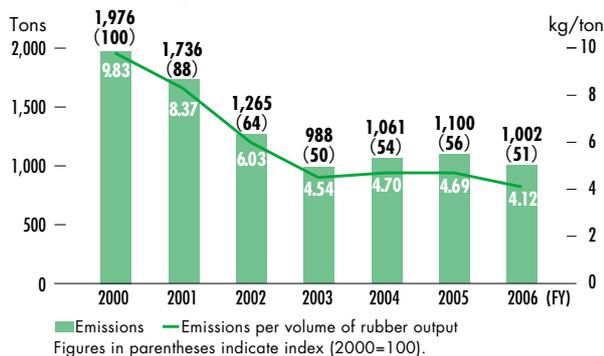
Use of volatile organic compounds (VOCs)<sup>2</sup> was cut by 49% compared with the base year for VOC limits (2000) in fiscal 2006 owing to reduced use of rubber volatiles containing the PRTR substances toluene and xylene. At the Mishima and Shinshiro Plants, cuts in toluene and xylene resulted in the impact on safety<sup>3</sup> improving for a second year running. In fiscal 2006, as a result of project activities to reduce toluene use, a

90% reduction compared with the level in fiscal 2000 was achieved. Use of trichloroethylene and HCFC Freon-141b in aircraft products will also be discontinued by September 2007.

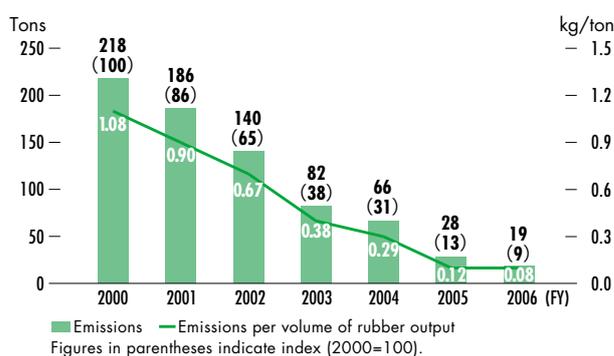
2. VOCs: Organic compounds present as a gas when emitted or dispersed into the atmosphere.

3. A ranking of the impact on safety in terms of the effects on "human health" and "ecosystems" calculated based on Kanagawa Prefecture's "Guidelines on Assessment of Safety Impact of Chemicals." Details are available online ([http://www/ycr-pressroom.jp/env\\_en](http://www/ycr-pressroom.jp/env_en)).

### Emissions of organic solvents (VOCs)



### Toluene emissions (all establishments in Japan)



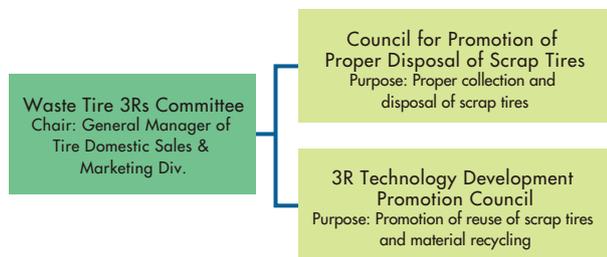
# Promotion of Proper Disposal of Scrap Tires and 3Rs

## Framework for Promotion of Reduction, Reuse, and Recycling of Scrap Tires to Combat Global Warming

Proper collection and reuse of scrap tires is pursued under the leadership of the Waste Tire 3Rs Committee. This committee consists of two councils: the Council for Promotion of Proper Disposal of Scrap Tires, and the 3R Technology Development Promotion Council.

\*The "3Rs" are: reduction, reuse, and recycling.

### Framework for recycling of scrap tires



## Hoping to raise all employees' awareness

It is important to raise the overall rate of recycling of scrap tires through a combination of action by industry as a whole and independent activities pursued by the Yokohama Rubber Group to reduce, reuse, and recycle tires. The Yokohama Rubber Group will raise the proportion of scrap tires collected, and at the same time accelerate development of products that make use of scrap tires. In conjunction with this, we aim to raise awareness among all our employees.



**Koichi Tanaka**  
Managing Corporate Officer,  
General Manager of Tire Domestic  
Sales & Marketing Div.

## Development of Recycled Products

Led by the 3R Technology Development Promotion Council, we are pursuing reuse of scrap tires and development of material recycling technologies. In fiscal 2006, work in this area produced the following results.

### Porous Elastic Road-surfacing Material That Contributes to Safety and Conservation of Resources

This porous elastic road-surfacing material is made from rubber chips that are recycled from scrap tires and silicon sand hardened with urethane resin, and it can be used for a variety of products that contribute to safety, comfort, resource conservation, and resource recycling. In fiscal 2006, it was awarded the company's in-house Outstanding Performance Award for Environmentally Sound Products.

#### 1) Safety and Comfort

The material's high air content gives it outstanding sound absorption performance. In tests held on a section of public road in Zama City, Kanagawa Prefecture, in November 2006, it was found to be 90% quieter than ordinary asphalt. It also has excellent drainage properties, prevents slippage and splashing, and helps prevent freezing.



Section of public road surfaced with the new material for tests (the part of the darker color)

#### 2) Resource Conservation

The use of urethane resin makes the material more heat resistant, preventing the formation of ruts caused by large trucks and other heavy vehicles. It is therefore expected to be around twice as durable as ordinary asphalt surfacing.

#### 3) Resource Recycling

Three square meters of the material can be made from a single scrap tire. It can also be recycled into numerous products, including anti-slip surfacing for pedestrians, and the barrier-free grating material (ditch lids) "Eco-Soft," which is colored for ease of recognition for disabled users.



Eco-Soft

#### First in the Industry to Mass Produce Recycled Rubber

In January 2007, we commenced full-scale mass production of recycled rubber in the company. Using our own specially developed technology, rubber can be recycled into higher quality raw material than is possible with conventional techniques, thus ensuring that using recycled materials does not lead to a decline in quality. In 2007 we plan to use 400 tons of recycled rubber as raw material for tire products.



Mass-production equipment introduced at the Mie Plant

## Aiming at a Higher Rate of Controlled Scrap Tires

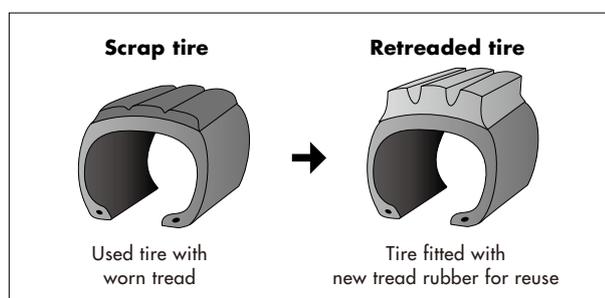
Led by the Council for Promotion of Proper Disposal of Scrap Tires, we are engaged in proper management of manifests and accurate tracking of the quantity of scrap tires collected. In order to enhance manifest management, tire distributors are pursuing centralized

control of manifests in their areas, while at the same time regularly auditing scrap tire collectors and transporters. Action is being taken to ascertain the number and tonnage of scrap tires collected. In fiscal 2006, the rate of controlled scrap tires was 64.2%.

## Retreaded Tires Contributing to Reuse of Scrap Tires

### Four Centers Established in Japan

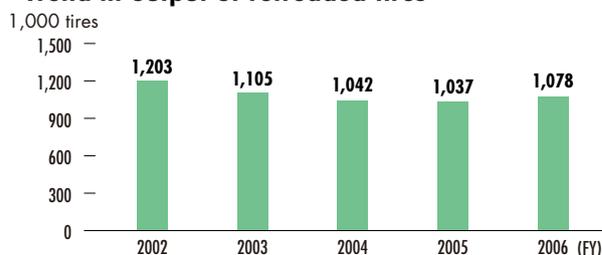
Retreaded tires are used truck and bus tires that are readied for reuse by fitting them with new tread rubber. The Yokohama Rubber Group has established two specialist retreaded tire companies in Japan—Yokohama Tire East Japan Retread and Sanyo Retread—to manufacture and distribute retreaded tires at four locations across the country.



### Designated Procurement Product

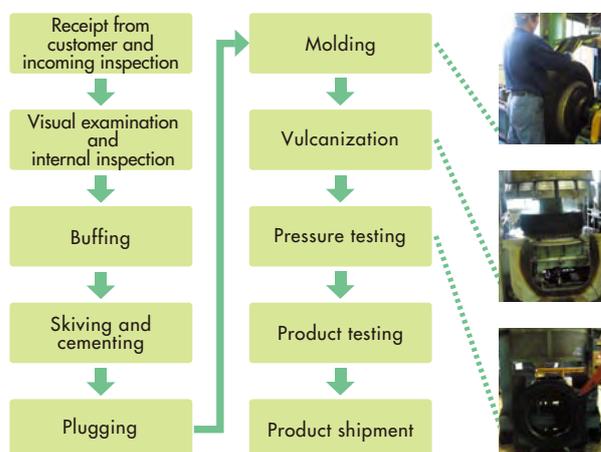
Consigned tires for retreading, which are received from the customer and returned after retreading, have been made a "designated procurement product" under the Law on Promoting Green Purchasing.

### Trend in output of retreaded tires



Sources: Ministry of Economy, Trade and Industry, Japan Automobile Tire Manufacturers Association (JATMA).

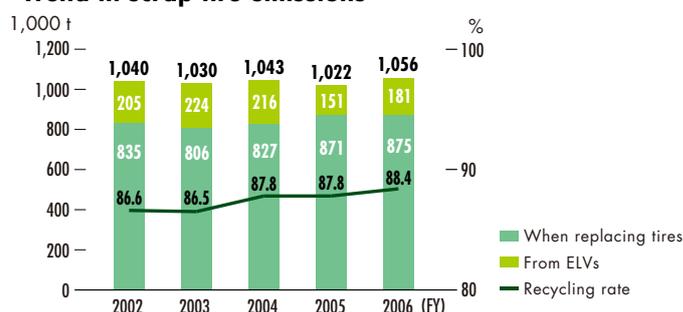
### Tire retreading process (re-molding method)



## Scrap Tire Emissions and Recycling Rate in Japan

Japan produced around 103 million scrap tires weighing a total of 1,060,000 tons in fiscal 2006. 83% were produced when replacing tires, and 17% when vehicles reached the end of their lives. The recycling rate was 88.4%.

### Trend in scrap tire emissions



Source: JATMA.

# Quantitative Monitoring of Activities by Means of Environmental Accounting

## Environmental Conservation Cost

Owing to the continued enhancement in fiscal 2006 of activities to combat global warming, such as the introduction of cogeneration systems, environmental conservation cost (investment) in fiscal 2006 rose 3.8% from a year earlier to ¥388 million

Unit: ¥million

Category of environmental conservation cost	Principal measures	FY2005		FY2006	
		Investment	Cost	Investment	Cost
Business area costs		517	1,893	598	1,604
Pollution prevention costs	Cost of deodorization equipment, dust-proofing equipment, and other environmental measures	63	368	198	350
Global environmental conservation cost	Investment in cogeneration facilities, cost of energy-saving activities, etc.	374	149	388	105
Resource recycling costs	Waste sorting and processing costs	80	1,376	11	1,149
Upstream and downstream costs	Furnishing of environmental supplies, additional expenditures on reducing environmental load	14	267	3	309
Management activity costs	Maintenance and operation of EMS, data disclosure costs	0	511	0	459
R&D costs	Cost of research and development to reduce environmental load	5	402	190	617
Social activity costs	Activities contributing to the environment in environmental terms	0	17	0	14
Subtotal		535	3,090	791	3,002
<b>Total</b>			<b>3,626</b>		<b>3,794</b>

Scope: Yokohama Rubber production sites in Japan in the period from April 2006 to March 2007. Data compiled in accordance with Japanese Ministry of the Environment, *Environmental Accounting Guidelines 2005* and Japan Rubber Manufacturers Association, *Environmental Accounting Guidelines 2003*. R&D costs consist of expenditures on development work to lower environmental load and development of environmentally sound products. Personnel costs were calculated based on man-hours expended on environmental conservation activities. Environmental damage or loss was zero. Depreciation costs are not included.

## Economic Effects and Environmental Conservation Effects

Installation of a cogeneration system at the Mie Plant and energy-saving activities made major contributions to improving the economic effect and reducing emissions of greenhouse gas emissions.

**Economic effect** Unit: ¥million

Category	Details	FY2005	FY2006
Income	Income from waste recycling generated in the course of business activities	83	143
Cost reductions	Reduction of costs due to energy savings	283	1,254
	Reduction of costs due to use of recycled products	588	541
<b>Total</b>		<b>954</b>	<b>1,938</b>

**Environmental conservation effect**

Category	Reduction compared with previous year	Page in this report
Reduction in greenhouse gas emissions (1,000 t-CO <sub>2</sub> )	30	P32
Reduction in organic solvents (t)	98	P37
Waste disposed of by landfill (t)	Continuation of zero emission	P31
Water use (10,000 m <sup>3</sup> )	8	P35

### Environmental Accounting of Group Companies

Toughened measures to lower environmental load in fiscal 2006 led to a 105% increase in total investment and costs compared with the previous year.

Unit: ¥million

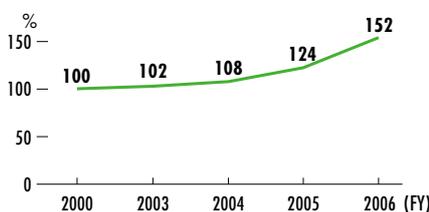
Category	FY2005		FY2006	
	Investment	Cost	Investment	Cost
Business area cost	5	26	17	59
Management activity and social activity costs	0	9	0	6
Subtotal	5	35	17	65
<b>Total</b>	<b>40</b>	<b>82</b>		
Economic effect	9	9		

Scope: Yokohama Tire East Japan Retread, Sanyo Retread, SC Kingflex.

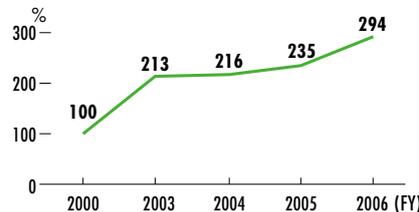
## Environmental Efficiency

Environmental efficiency is a measure of whether business activities are undertaken efficiently while limiting the impact on the environment. It is calculated by the following formula, and a higher index means that improvements are being made: environmental efficiency = sales / environmental load. Of the three key indices that Yokohama Rubber uses as indicators of environmental load, the greenhouse gas index improved 28% in fiscal 2006 compared with the previous year.

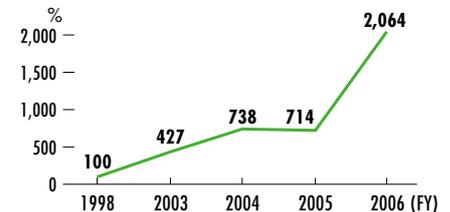
**Greenhouse gas index<sup>1</sup>**



**Organic solvent index<sup>2</sup>**



**Recycling index<sup>3</sup>**



1. Sales/greenhouse gas emissions: Based year (FY2000) = 100. 2. Sales/solvent emissions: Base year (FY2000) = 100. 3. Sales/final disposal: Base year (FY2000) = 100. (For the definition of final disposal, see p. 31.)

# Coexistence with Society Summary of Fiscal 2006

## With Customers

- p.43 Acquisition of ISO/TS16949 international certification of quality

## With Shareholders and Investors

- p.44 Payment of commemorative dividend at fiscal year ended March 31, 2007 to mark 90th anniversary

## With Employees

- p.45 Increase in reemployment of employees aged 60 and over as "veterans"
- p.46 Increase in employees taking childcare leave
- p.48 Female employees spread the word about economizing through the MD (waste-reduction) campaign



President Tadanobu Nagumo (center right) and then General Manager of the Waste-Reduction Promotion Dept., Toru Kobayashi at the launch of the MD Detection Squad in February 2006

## With Local Communities

- p.51 Backing for racing driver Ukyo Katayama's cooking-oil-powered car entry in the Dakar Rally
- p.51 Hosting of LIVE ecoMOTION charity music event
- p.52 Organization of YOKOHAMA Forever Forest project



Ukyo Katayama's cooking-oil-powered car in the Dakar Rally



LIVE ecoMOTION charity music event



Yokohama Rubber employees planting nursery seedbeds in preparation for the YOKOHAMA Forever Forest project

# Providing Reliable Quality

## “Deliver the Best Products at Competitive Prices and on Time” as the Basic Policy

One of the Yokohama Rubber Group’s basic policies is to “deliver the best products at competitive prices and on time.” We believe that one of a manufacturer’s fundamental duties is to provide products capable of delivering the performance that the customer wants, at a price that the customer finds acceptable, as and when required by the customer.

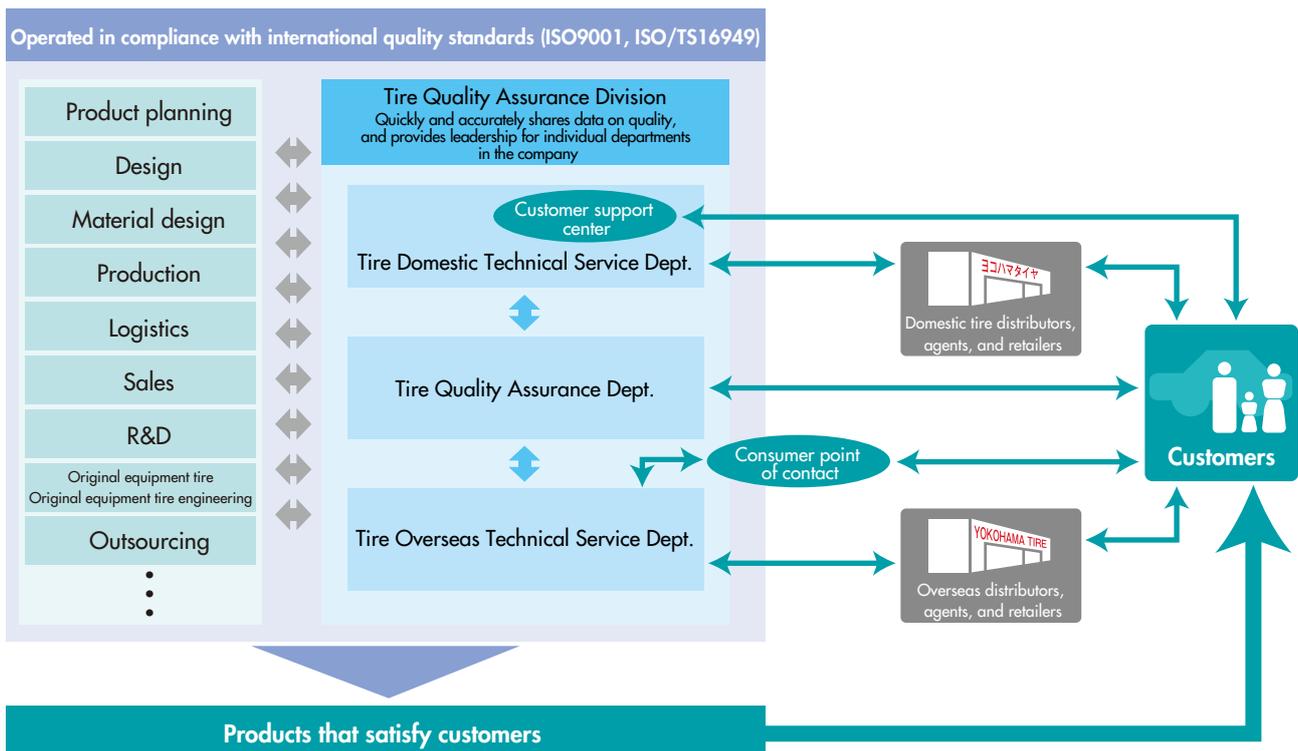
We therefore actively listen to customers’ needs regarding quality and customer demands generated by globalization, and use this information as valuable feedback for developing new products, increasing product performance, and improving services.

## Quality Assurance in the Tire Group

Yokohama Rubber considers it vital to prevent quality problems from arising in the first place, to continue to deliver products that satisfy the customer, and to actively generate quality that will delight the customer. In line with this approach, the Tire Quality Assurance Division maintains a close watch on quality, ranging from monitoring customer feedback to keeping an eye on the production frontline, and has established a quality system covering the entire company—from product planning to

distribution and services—in order to raise the level of manufacturing putting quality above all else. Looking ahead, we intend to enhance activities to develop the “4M” elements (i.e., Man, Machine, Material, and Method) and requirements for stable production of non-defective products (including optimized processing), and to boost activities to ensure incorporation of customers’ various needs into commercial products in the product development process for a higher level of satisfaction.

### Quality assurance framework in the Tire Group



## Quality Assurance Based on ISO9001 and ISO/TS16949

The Tire Group operates a quality assurance system based on the ISO9001<sup>1</sup> and ISO/TS16949<sup>2</sup> international quality management system standards, depending mainly on tire type.

### ISO9001

Domestic tire operations were ISO9001/9002:1994 certified in 1995. Certification of compliance with ISO9001:2000, revised in 2000, was completed in 2003.

1. ISO9001: This standard applies where it is necessary to demonstrate that a company is capable of consistently providing products that meet customer requirements, or if a company aims to improve customer satisfaction by ensuring the effective operation of systems, (including processes for continuous improvement of quality management systems) and assuring compliance with customer requirements.
2. ISO/TS16949: This ISO9001-based standard also incorporates the quality management system requirements of the automobile industry.

### ISO/TS16949

Three domestic tire plants acquired QS9000 certification (the quality management system standard used by the U.S. automobile industry). Due to the discontinuation of this standard in December 2006, however, the three plants acquired ISO/TS16949 certification in June of that year.

### Acquisition of international quality standards

		ISO9001:2000	ISO/TS16949
<b>In Japan</b>	Mishima Plant	September 2003	June 2006
	Shinshiro Plant	September 2003	June 2006
	Mie Plant	September 2003	June 2006
	Onomichi Plant	September 2003	
<b>Overseas</b>	Yokohama Tire Corporation	May 2002	
	Yokohama Tire Philippines	April 2002	
	Hangzhou Yokohama Tire	September 2004	December 2006
	Yokohama Tire Manufacturing (Thailand)	April 2006	

## Internal Communication of Customer Feedback as Valuable Information

In order to listen more widely and seriously to the varied and valuable feedback that we receive from customers regarding quality so as to develop the products that customers want more rapidly, we are enhancing and expanding the technical services provided by our domestic and foreign tire distributors, overseas group companies, overseas branches, and other operations. Within Japan, we have established a customer support center at head office to respond quickly and appropriately to inquiries and requests for advice from customers by telephone and email.



Please click on "Inquiries" for advice by email.

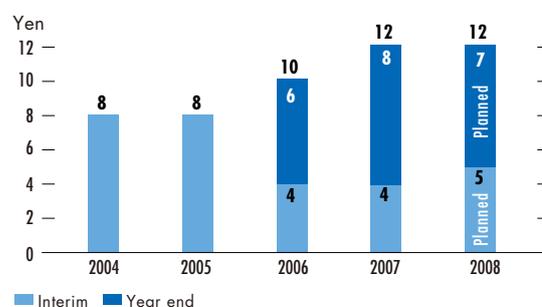
Customer inquiries can be made via Yokohama Rubber's corporate website (<http://www.yrc.co.jp>).

# Winning the Backing of Shareholders and Investors

## Continuation of Stable Dividends is Fundamental

It is our basic policy to continue paying stable dividends while retaining sufficient earnings for future business expansion and consolidation of management structures. Dividends have been paid twice per year since fiscal year ended March 31, 2006. As Yokohama Rubber celebrates the 90th anniversary of its establishment in October 2007, a commemorative dividend of ¥2 was added to the year-end dividend per share of ¥6 in fiscal year ended March 31, 2007, resulting in a total dividend of ¥8 (¥12 for the year).

Trend in dividend per share (for the years ended March 31)



## Data Disclosure to Raise Management Transparency

### Appropriate Disclosure

Material management data, financial results, and other such data are disclosed as appropriate in accordance with the Securities and Exchange Law and stock exchange requirements by submitting information to stock exchanges, releasing news releases to the media, publishing information on our website, and other such means.

### Briefings on Financial Results

Briefings on our financial results are held for securities analysts and institutional investors. These are traditionally held twice a year at the end of the first half of the year and at year end. However, they have been changed to be held quarterly since the latter half of 2006, and are scheduled to be held four times in this fiscal year.

### Investor Relations Homepage

We have set up an investor relations homepage ([http://www.yrc-pressroom.jp/ir\\_en/](http://www.yrc-pressroom.jp/ir_en/)), where you will find messages from the president, information on our financial results, and other financial materials.



### Information Tools

In addition to sending interim and year-end reports to our shareholders, we publish annual reports in English. From 2007, Japanese editions of our annual reports will also be available from our website.



## Annual Shareholder Questionnaire

In order to gather feedback from our shareholders, a reply postcard is sent out with our year-end reports for a questionnaire survey. The first time we did this was for what was then called our "interim business report" in fiscal year ended March 31, 2005. Since fiscal year ended March 31, 2006, a questionnaire survey has been conducted once a year at the time of the year-end financial results. Finding out shareholders' reasons for purchasing our shares, what kinds of information they want, and other feedback contributes to our improvement of our IR activities.

### Share situation (as of March 31, 2007)

Authorized number of shares:	700,000,000
Number of shares issued and outstanding:	342,598,162 (unchanged from previous fiscal year)
Number of shareholders:	16,995 (down 3,723 from previous fiscal year-end)

### Distribution of ownership (as of March 31, 2007)

Category of owner	Number of shareholders	Number of shares (unit: thousand)	Proportion of shares (%)
Japanese individuals and others	16,403	48,570	14.2
Japanese financial institutions	101	160,245	46.8
Other Japanese companies	278	68,888	20.1
Foreigners	212	57,638	16.8
Treasury stock	1	7,257	2.1
Total	16,995	342,598	100.0

# Creating a Diverse and Enjoyable Workplace

## Our Basic Objectives Concerning People and Individuals

Yokohama Rubber aims to be an organization that nurtures highly motivated individuals, and in which such individuals can work together to produce major achievements. We therefore aim to create an environment in which a diversity of human resources, including older people, women, and non-Japanese, can get the most out of their abilities, leading in turn to the growth of the company as a whole.

## Use of Human Resources

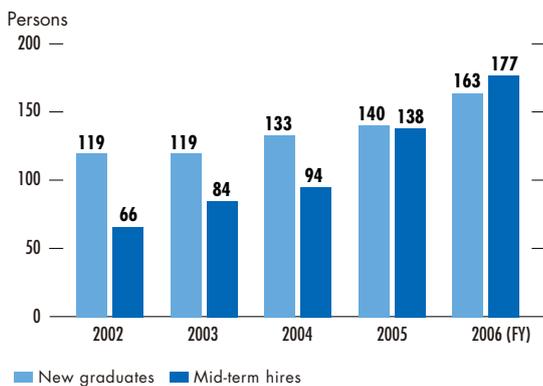
### Hiring

Adopting a long-range perspective, we combine steady hiring of new graduates with employment of experienced professionals according to business needs from a long-range perspective. Some engineers and other technical personnel working at plants are also hired for specific terms of employment.

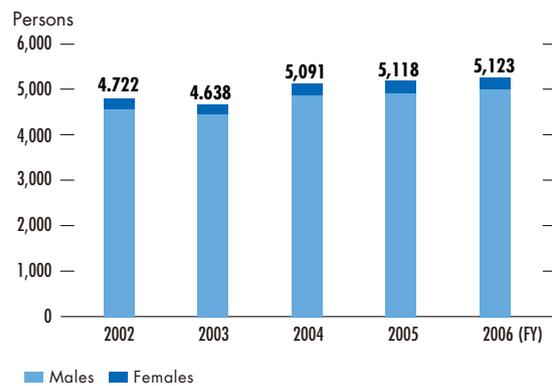
### Employment of "Veterans"

In April 2006, we introduced the "Partner Program" to reemploy beyond the age of 60 employees who have reached mandatory retirement age. Yokohama Rubber sees this program not in negative terms as a means of providing stable employment for older people, but rather as an effective means of transmitting skills and facilitating business operations. 74 % of the mandatory retirees in fiscal 2006 were reemployed under this program.

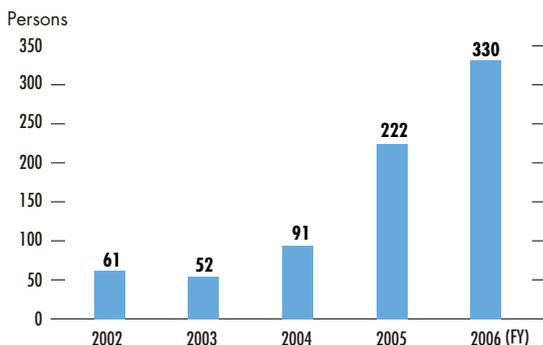
### Trend in number of hires



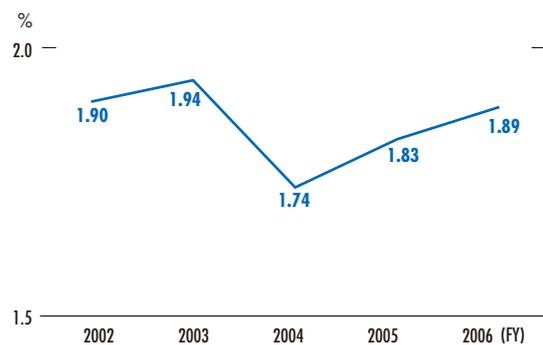
### Trend in number of employees



### Trend in number of workers reemployed



### Trend in proportion of persons with disabilities



## Creating a Diverse and Enjoyable Workplace

### Developing the Working Environment

#### Childcare Leave Scheme

Rules on childcare leave were established in 1992, basically providing support for employees with children under the age of one. Reduced working hour arrangements have also been put in place for parents of preschool children, and employees with children up to the third grade can take advantage of staggered working hour arrangements.

#### Nursing Care Leave Scheme

Since 1994, we have provided support for employees with relatives requiring ongoing nursing care, such as reduced working hour arrangements. Child nursing leave for parents caring for sick children has also been expanded to include parents of elementary school

children. (Under statutory requirements, only parents of preschool children need be included.)

#### Fringe Benefits

In addition to company dormitories, housing, and onsite eating facilities, paid "refreshment" leave is provided for employees who have been with the company continuously for 10 years and 30 years.

#### Measures against Sexual Harassment

A basic policy on dealing with cases of sexual harassment has been established, steps are taken to raise employee awareness of the issue is raised, and a counseling service has been set up to deal with complaints and requests for advice.

## Development of Human Resources

We believe that individual growth translates into corporate growth, and provide full support for the development of the individual. A training program has been put in place to develop "professional human resources" who can display their abilities, are highly motivated, have a broad outlook, and have an impact on those around them.

### Training arrangements

Type of training	Program title
Level-specific training	Training for new hires and new recruit follow-up training
	Leadership training
	Training of newly-appointed management-track workers
	Training of general managers
	Senior training
Job-based training	Improvement of workplace problem-solving skills
Skills development training	Global human resource development
	Development of general business skills
	Development of particular and specialist skills
Training for all employees	Training in corporate ethics and compliance
Self-development support training	Language training
	Correspondence training
External study program (individual goals)	Domestic external study program
	Overseas external study program

### Development of Core Human Resources

Employees are encouraged to develop the mindset necessary to do business in the global marketplace, and to acquire level-specific leadership, presentation, negotiation, and other skills.

### Domestic and Overseas External Study Program

Arrangements have been established to enable employees to undertake postgraduate study at graduate schools in Japan and abroad, and to join outside research institutes on a temporary basis. Two or three employees undertake external study in this way each year.

### C2S Development-oriented Personnel Program

"C2S" stands for "Challenge & Communication System." Every six months, employees discuss the challenges that they face and what actions are expected of them with their superiors. They then set targets and objectives for themselves, and meet again six months later to confirm and assess their achievements and growth.

## Development and Transmission of Skills and Techniques

High-achieving staff with advanced specialist skills needed to enhance operations are accredited as "advanced specialists" to be focused on technical activities, while technical workers who are capable of making use of their specialist skills and knowledge to provide guidance for junior workers are accredited as "technical Meisters." (As of July 2007, there were

respectively 24 and 32 workers in each category.)

## Scholarships for Acquisition of Official Qualifications

In order to encourage more employees to acquire official qualifications that are essential to our business operations and are difficult to acquire, a scholarship program has been established.

## State of Labor-management Relations

Recognizing that the growth of the company and stability in workers' lives are in the interests of both labor and management, arrangements for joint labor-management consultations on a wide range of matters concerning employment, working conditions, and fringe benefits have

been established. Works councils include the Central Labor-Management Council, regional labor-management councils at the level of individual business establishments, and also various works committees, which deliberate on and confirm numerous important issues.

## Creating a Safe Workplace

### Basic Policy on Health and Safety Management

#### Basic Policy

Safety is a fundamental concern that underlies everything, and every individual shall always put safety above all else to create a safe, accident-free workplace under the firm leadership of managers and supervisors.

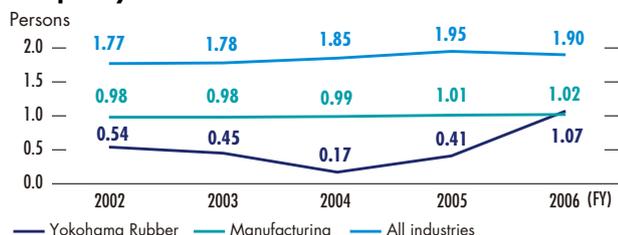
#### Key Measures

1. Development of safe human resources
2. Making of equipment fundamentally safe
3. Creation of a comfortable workplace
4. Health and fitness in mind and body
5. Prevention of road accidents

### Occurrence of Industrial Accidents

The rate of lost-worktime injuries in fiscal 2006 was 1.07, which was considerably higher than in the previous year. There also occurred a fatal accident in August at the Onomichi Plant. In order to prevent a recurrence, full checks were made of similar equipment, improvements made to all potentially unsafe spots, and a company-wide review made of high-risk locations.

#### Frequency of industrial accidents



Lost-worktime injuries = (number of work accidents / total hours worked) x 1,000,000 hours  
Data on manufacturing and all industries are from Survey on Industrial Accidents.

### Health and Safety Management Framework

Below the Central Health and Safety Committee, which oversees safety throughout the company, there are site health and safety committees at each business establishment, and departmental health and safety committees in each department and workplace (more commonly referred to as "health and safety subcommittees"). In January 2007, the health and safety framework was further strengthened by the establishment of the Safety & Health Management Dept., which is responsible for health and safety throughout the company, and health and safety sections at each plant.

#### Organizations responsible for health and safety

##### Central Health and Safety Committee (meets twice per year)

Chair: General Manager, Tire Production Div.  
Management members: Corporate Officers in charge of MB Production and Corporate Personnel, site general managers, facility and material general manager, General Manager of the Corporate Personnel Dept.  
Labor union members: Members of labor union's central executive committee members

##### Site Health and Safety Committee (meets once per month)

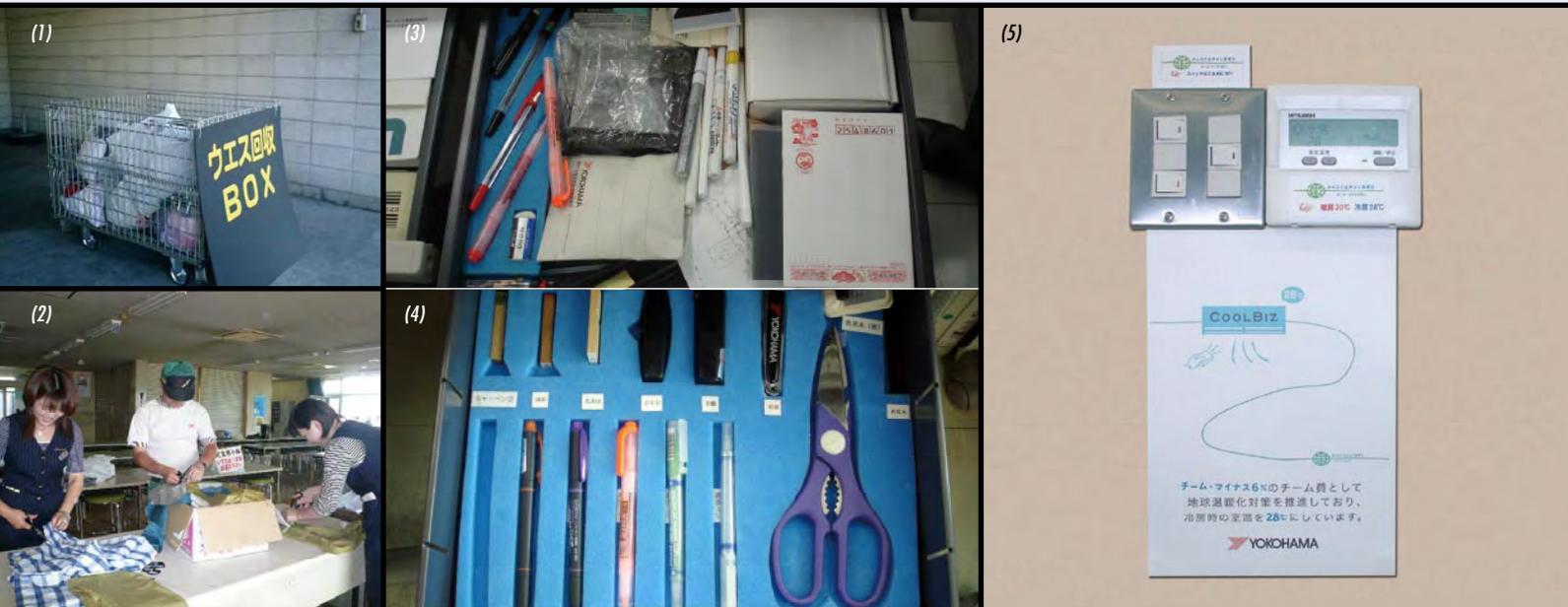
Chair: Site general manager  
Management members: Officials designated by site general manager  
Labor union members: Officials elected by labor union  
Observer: Official from company involved with site

##### Departmental Health and Safety Committees\* (meet once per month)

Chair: Department general manager  
Management members: Workplace supervisors  
Labor union members: Labor union workplace members  
Observer: Official of company involved with department

##### Employees

\*Commonly referred to as "Health and Safety Subcommittees."



Used clothing that is no longer required is collected and used as cleaning rags ((1) and (2)). Unnecessary purchases of expendable supplies are reduced by tidying drawers to make their contents more easily visible (before (3) and after (4) tidying). Posters to raise employee awareness of global warming are displayed near electrical switches.

## Raising Awareness of Energy and Resource Conservation through the MD Campaign

In order to eliminate wastefulness at head office and administrative offices at our plants, we launched the MD Detection Squad in February 2006. Through its activities, the MD Detection Squad ("MD" stands for muda-dori, which means "waste-reduction"), which consists of around 40 female clerical workers, is raising awareness of energy and resource conservation within the company.

### ■ "Don't Do at Work What You Wouldn't Do at Home!"

Noticing that workers quite happily do things at work that they would not do at home, such as leaving lights on and taps running, the MD Detection Squad hunts out waste in the workplace from a simple view like this. Even office supplies are purchased wastefully, with some sections having shortages while a neighboring section may have a surplus. A system was therefore established for bringing together surplus supplies from each section in one location for disbursement when required. An internal site called "YRC\*FleaMart" has also been launched to enable employees to swap things such as old desks and lockers between sites. By thus eliminating wasteful purchases of office supplies, savings of at least ¥30 million a year have been achieved.

### ■ Environmental Consciousness Becomes Widespread

#### Thanks to the MD Detection Squad

The MD Detection Squad's ideas cover a wide spectrum, including switching off lights in lavatories and offices during lunchtime, stopping people from forgetting to switch off printers and whiteboards, and donating calendars and notebooks that were received as gifts to outside organizations. They have also trained their sights on the production floor, encouraging the collection of old clothes for use as rags to clean grease off machinery, and washing cotton work gloves for reuse which used to be discarded after the use. The discovery and elimination of such seemingly minor instances of wastefulness have led to rapidly rising awareness in the company of resource recycling and energy conservation.



### What are MD Activities?

Recognizing that wasteful work consumes extra resources and energy, not only increasing business costs but also increasing the impact on the environment, Yokohama Rubber has been taking steps to eliminate wastefulness (muda-dori) since November 2005, and the MD Detection Squad is a highly visible player in these activities. A prime example of the type of progress made is the reduction of waste space. In fiscal 2007 at the Hiratsuka Factory, in order to reduce energy for transportation, use of vacant space will be led to lower spending on outside warehouses.

MD Detection Squad member sorting stationery for recycling at the company

# Strengthening Ties with Society

## Organization of Plant Tours, Presentations, and Other Events

Plant tours and presentations are organized for neighboring residents' associations and local residents, and plant tours are held for employees' families. Plants also stage events to provide opportunities for fostering ties with local residents, and cooperate with initiatives undertaken by municipalities as "safe havens" for children if they run into danger.



Tour for employees' families (Shinshiro Plant)



"Children's Support" plate (Hiratsuka Factory)

## Participation in Cleanup Activities, Festivals, and Other Local Events

Yokohama Rubber participates in volunteer and cleanup activities and tree-planting campaigns organized by municipalities. In fiscal 2006, 100 employees from the Mie Plant participated in the "Great Tanabata Cleanup" of the Setagawa River, and 179 employees from the Shinshiro Plant took part in city cleanup activities. Establishments also actively participate in festivals, firework displays, ekiden road races, and other local events, helping to make them livelier.



Shinshiro Cleanup Festival (Shinshiro Plant)



Omitama City Ekiden Road Race (Ibaraki Plant)

## Support for Education Activities

Yokohama Rubber hosts hands-on classes and environmental education for schoolchildren to assist local elementary and junior high schools in their educational activities. In fiscal 2006, students from a total of 13 schools were hosted by the Mishima, Shinshiro, Nagano, and Hiratsuka East Plants, while the Hiratsuka Factory provided training for a school for deaf children in the use of automated external defibrillators (AEDs) in cases of cardiac arrest, and the Mie Plant hosted boiler skills workshops for industrial high schools, which were taught by the plant's own employees.



Hands-on learning by local junior high school pupils (Mishima Plant)



AED training at a school for the deaf (Hiratsuka Factory)

## Opening Plant Facilities to the Public

Site facilities such as plazas, sports grounds, and gymnasiums, are opened for use by residents, local clubs, and firefighters. In 2006, tennis courts attached to the Hiratsuka Factory's employee dormitories were opened to the public for around 270 days, and the Mishima Plant's gymnasium was used 592 times, providing an indication of the popularity of these facilities. The "Dinosaur Park" at the Onomichi Plant, which attracted 1,783 visitors in fiscal 2006, and "Tire Land" at the Shinshiro Plant also became firm favorites with local residents seeking a place to relax.



Ground opened to local soccer clubs (Mie Plant)



Dinosaur Park (Onomichi Plant)

## Strengthening Ties with Society

### Recognition for Our Contributions to the Environment and Society

In May 2007, the Mishima Plant became the first in the tire industry to be awarded the Fifth Cogeneration Center Award for Encouragement of Environmental Conservation. This was followed in July 2006 by the receipt from the Japanese Minister of Justice of a letter of appreciation for the Mie Plant's assistance and cooperation in the administration of correctional facilities through its organization of plant tours for local medical juvenile reformatories four times a year for more than a decade.



General Manager Ichiro Suzuki (right), with a letter of appreciation (Mishima Plant)



General Manager Yoshito Mochinaga with a letter of thanks (Mie Plant)

### Participation in WWF and Other Outside Organizations

Yokohama Rubber joined the "Team -6%" national campaign to fight global warming in June 2005, and in October 2006 became a corporate member of the World Wide Fund for Nature Japan (WWF Japan).

We are also a sponsor of JAWFP, which is a specified NPO set up to support the United Nations World Food Programme (WFP).

## Activities of Overseas Group Companies Contributing to the Environment and Society

### Yokohama Tire Philippines

#### Tree-planting Activities

In July 2007, the company planted palms and other trees around the plant to reduce the smell of rubber escaping from the plant. It also plays a part in tree-planting activities undertaken by government-related bodies, NGOs, and the military



Employees planting palm trees

#### Participation in Recycling Events

As a leading member of the district Environmental Practitioners Association (EPA), the company supports local recycling events, and also participated in "an environmental march" held in concert with government-related bodies in Environmental Month in June.

#### Donation of Recyclable Materials

Obsolete equipment, drums and pallets that can be recycled into desks and chairs, scrap tires usable as plant pots, and other recyclable resources are donated to local primary schools and communities.



Scrap tire reused as a plant pot

### SC Kingflex Corporation

#### Interaction with the Local Community

In Taiwan, low and high-pressure hose manufacturer and distributor SC Kingflex Corporation called on other companies on its industrial estate to join it in building a mausoleum to the local god of the land, and it also cleans the streets leading to the mausoleum when festivals are held. Since 2002, it has donated 30,000 yuan to local primary schools for environmental education. In recognition of these activities, the company was recognized by Taiwan's Chinese Federation of Labour, for its outstanding contribution to the environment in November 2006.



Cleaning the streets leading to the mausoleum



President Lin Jin Chi (right) holding the medal for outstanding contribution by a company to society

## Environmental Communication

Yokohama Rubber publishes environmental information through its environmental and social reports, corporate website, and internal newsletters, and raises awareness

of the importance of environmental protection through its support for social activities contributing to the environment.

### Support for Social Activities Contributing to the Environment

To highlight the potential of next-generation motorization, we provided backing for Ukyo Katayama's Dakar Rally 2007 entry, which used a bio-diesel car powered by refined cooking oil for frying tempura. We also support the "Japan EV Club," whose mission is to popularize use of electric vehicles (EVs) and low-emission vehicles (LEVs), and since 1995 we have sponsored a number of EV races.



"Toyota Land Cruiser 100" in the Dakar Rally



The latest EVs at a test-riding event in April 2007

### Exhibitor at "Eco Products 2006"

We have been an exhibitor at the "Eco Products - Eco Style Fair" exhibition since 2000. Exhibits in 2006 included the DNA brand of eco-tires for passenger cars, the ZEN eco-tire for trucks and buses, and porous elastic road-surfacing material made from recycled products. We also invited racing driver Ukyo Katayama, who actively campaigns to raise awareness of environmental conservation, to put in a guest appearance at the Yokohama Rubber booth to chat with visitors.



Yokohama Rubber booth at "Eco Products 2006"



Guest Ukyo Katayama

### LIVE ecoMOTION Charity Music Event

In July 2007, the LIVE ecoMOTION charity music event was held at the Shibuya C.C. Lemon Hall (Shibuya Public Hall). Featuring live performances by artists who performed free of charge, the concert was designed to be a fun and exciting event that also raised awareness of global warming and stimulated thought on the environment. It drew an audience of around 1,700, and the entrance fees (¥500 per person) and other contributions worth a combined total of ¥1,031,000 were donated in their entirety to WWF Japan. Some 40 employees from Yokohama Rubber helped out with the organization of the event as volunteers.



"Eco Manifesto" cards on which visitors have written down their thought on the environment



MONKEY MAJIK on stage



Akira Miyawaki (far right in left photo) surveying soil quality at the Hiratsuka Factory ahead of tree planting on June 8, 2007, and Yasuo Tominaga, Chairman of Yokohama Rubber (left in the same photo). The main photo gives an impression of what the forest should look like when mature.

## Launch of the YOKOHAMA Forever Forest Project

“YOKOHAMA Forever Forest” is a project to create woodland at all our production operations in Japan and overseas by the time of the company’s centenary in 2017. The project will kick off at the Hiratsuka Factory in November 2007, and will involve the planting of some 220,000 trees at all production sites in Japan.

### ■ Larger Effect on Environmental Conservation by Turning Plants into “Forests”

We aim to make our plants direct contributors to environmental conservation by growing “forests” onsite to clean the air and create habitats for birds and insects. By planting broad-leaved evergreen trees that are robust and resistant to burning, these areas of woodland will also be able to serve as evacuation sites in the case of disasters. The project is thus not just about planting trees; it also represents engagement in green recycling and regeneration activities to protect the global environment and the lives of local communities.

### ■ Development of “Own-grown Forest” in Cooperation with Local Residents

All tree-planting activity is performed by employees of the Yokohama Rubber Group, their families, and local volunteers with the aim of creating an “own-grown forest.” The project will begin with the gathering of 100,000 acorns for seedlings from the autumn of 2007, and the raising of 30,000 seedlings per year from the acorns collected.

### ■ Employment of the Proven “Miyawaki Method”

By planting “local trees” that are best suited to soil and local conditions under the direction of Akira Miyawaki, Professor Emeritus at Yokohama National University, who has been involved in tree-planting projects at 1,500 locations in Japan and overseas, we aim to create full-fledged “forests” that will last. The Miyawaki Method devised by Dr. Miyawaki is believed capable of producing a forest of trees 20 meters in height in a comparatively rapid 10 years.



Dr. Miyawaki giving a presentation at the Hiratsuka Factory ahead of the project’s launch on July 26, 2007

# Global Environmental Management Officers

For details on each site, please see our website ([http://www.yrc-pressroom.jp/env\\_en](http://www.yrc-pressroom.jp/env_en)).

## <Overseas>

**Hangzhou Yokohama Tire CO., Ltd.**



President: Ichiro Nakajima

**Yokohama HAMATITE (Hangzhou) Co., Ltd.**



President: Minoru Igarashi

**Yokohama Tire Taiwan Co., Ltd.**



President: Hisao Hashimoto

**YH America, Inc.**



Chairman & CEO:  
Hajime Yamazaki

**SAS Rubber Company**



President: Yoshihisa Nakabayashi

**SC Kingflex Corporation**



President: Hiroshi Tanimura

**Yokohama Tire Philippines, Inc.**



President: Hikomitsu Noji

**Yokohama Rubber (Thailand) Co., Ltd.**



President: Tomoji Saito

**Yokohama Tire Manufacturing (Thailand) Co., Ltd.**



President: Hisakuni Yamashita

**Yokohama Tire Corporation**



President: Norio Karashima

## <In Japan>

**Yokohama Tire East Japan Retread Co., Ltd.**



President: Harutaka Uchida

**Nagano Plant**



General Manager:  
Yoshinobu Sato

**Sanyo Retread Co., Ltd.**



President: Naruhito Nishioka

**Hiratsuka Factory**



General Manager:  
Keigo Ueda

**Ibaraki Plant**



General Manager:  
Masakazu Yahagi

**Hiratsuka East Plant**



General Manager:  
Noboru Asaba

**Onomichi Plant**



General Manager:  
Toshiyuki Kamibayashi

**Mie Plant**



General Manager:  
Yoshito Mochinaga

**Shinshiro Plant**



General Manager:  
Toshihiko Suzuki

**Mishima Plant**



General Manager:  
Ichiro Suzuki

# Results of Questionnaire on "Environmental and Social Report 2006"

## Impressions (multiple responses for 2 and 3)

(Number of respondents: 21)

### 1. Overall

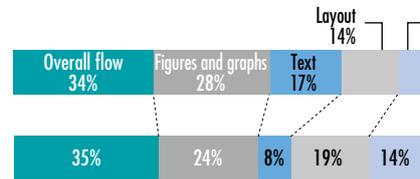
2006 Questionnaire



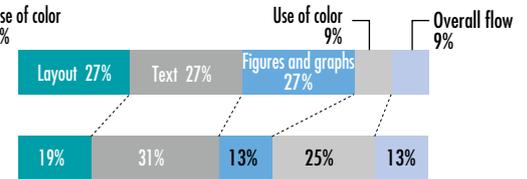
2005 Questionnaire



### 2. Good Points



### 3. Bad Points



## Particularly Interesting Topics

(multiple responses allowed)

Tires (10), coexistence with community (10), scrap tires/3Rs (8), president's message (6), environmental management (6), site information (6)

## Main Opinions and Requests

President's message conveys Yokohama Rubber's emphasis on the environment / Environmental matters are clearly being taken seriously / Obtained a good overall picture from "Highlights 2006" / Good to see who is actually responsible for environmental affairs / Small text made it difficult to read (2) / Frequent use of specialist terms (2)

## Areas for Improvement

### Simpler Continuity

In order to make the overall flow easier to understand, we have simplified the flow of activity described in "Action on the environment."

### Larger Text

Responding to comments that the small text made reading difficult, we have made the text larger and expanded use of blank space in the layout.

### More Concrete Examples of Activities

To show how activities contributing to the environment are becoming established, we have provided sections for introducing actual employees and their activities.

### Expanded Summary

To make the overview of fiscal 2006 easier to understand, we have added summaries at the beginning of the sections on "Action on the environment" and "Coexistence with society."

## Afterword by the Editor



**Tatsunari Kojima**  
**Chairman of the Editorial Board**  
 Director and Managing Corporate Officer in charge of Secretariat, Corporate Planning Dept., Corporate Communications Dept., Corporate Finance & Accounting Dept., MIS Dept., Internal Control Dept., President of Yokohama Corporation of North America

Thank you for reading "Environmental and Social Report 2007." This year's report was compiled focusing in particular on the following three points.

### 1. Describing Efforts to Combat Global Warming

In line with its goal of asserting world-class strengths in technologies for protecting the environment, the Yokohama Rubber Group is boosting its activities to combat global warming. One focus of this report was therefore on describing specific details of these activities.

### 2. Creating an Easy-to-read Report

Reports on corporate social responsibility (CSR) tend to make for hard reading, and our questionnaire of readers similarly indicated that many wanted the report to be made easier to understand. From this year's report, therefore, we are using larger print, and also substantially reducing the amount of text.

### 3. Improving Credibility

To increase credibility, reports from this year onward are being audited by the Shin Nihon Environmental and Quality Management Research Institute. While last year's report included a "third-party opinion," this year's carries a "third-party guarantee."

The Yokohama Rubber Group will strengthen its action on the environment and other CSR activities, and will continue to disclose information on these activities in an easy to understand manner. We look forward to our stakeholders' continued support and involvement in these endeavors.

# Third-party Guarantee

To ensure the reliability of the environmental information herein, this report has been subject to a third-party audit by the Shin Nihon Environmental and Quality Management Research Institute, whose findings are shown below. Regarding the indicators of environmental performance, an investigation was made of the accuracy and completeness of material environmental information stipulated in "Environmental Report Examination and Registration System" (Japanese Association of Assurance Organizations for Environmental Information, <http://www.jaoei.org/>), and the J-AOE mark on the back cover indicates that the environmental information contained in this report meet the J-AOE's reliability criteria for the award of its environmental report examination and registration mark.

## TRANSLATION

### Independent Assurance Report

August 30, 2007

Mr. Tadanobu Nagumo  
President and Representative Director  
The Yokohama Rubber Company, Limited

#### 1. Purpose and Scope of our Assurance Engagement

We have performed certain assurance procedures, based on the engagement with The Yokohama Rubber Company, Limited. (the "Company"), to express an independent opinion on the Company's Key Environmental Performance Indicators (the "Key Environmental Data" as provided in the Assurance and Registration Scheme of the Environmental Report<sup>1</sup>) of the Company for the year ended March 31 2007, reported in the Company's "Environmental and Social Report 2007" (the "Report"), with respect to whether the Key Environmental Performance Indicators are measured and calculated accurately in accordance with the reporting standards of sustainability reports<sup>2</sup> and whether material information is disclosed completely.

The collection of information and the presentation of the Report is the responsibility of Company's management. Our responsibility is to express an independent opinion on the Report.

<sup>1</sup> The Key Environmental Data as provided in the Assurance and Registration Scheme of the Environmental Report refer to the conditions set by the Japanese Association of Assurance Organizations for Environmental Information ("J-AOEI") in order to allow companies to display the trademark shown above (The trademark is shown in the original Japanese version).

<sup>2</sup> The reporting standards refer to the Ministry of Environment's "Environmental Reporting Guidelines 2003", and the Global Reporting Initiatives' "Sustainability Reporting Guidelines 2002", and the complementary guidelines made by the Company.

#### 2. Outline of Assurance Procedures Performed

We have performed limited assurance procedures in accordance with the "Practical Guidelines for the Assurance of Non-financial Statements (exposure draft)" of the Japanese Institute of Certified Public Accountants in July, 2005 and the "Practical Guidelines for the Assurance of Environmental Information" of the J-AOEI in January, 2006 which is mainly composed of inquiries and analytical procedures. Therefore, our assurance engagement provides relatively limited assurance compared to a reasonable assurance engagement.

The following is an outline of the procedures performed:

We have obtained understanding of the Company's procedures and assessed it for the collection and aggregation of the Environmental Performance Indicators, as well as recalculated and reconciled them with the corroborating evidences on a test basis. In addition, we have performed on-site inspections<sup>3</sup> and reviewed the Environmental Performance Indicators generated at each site.

<sup>3</sup> The on-site inspections were performed at the headquarters (the Hiratsuka Factory), the Hiratsuka Higashi Factory, the Mishima Factory.

#### 3. Conclusion

Based on the assurance procedures performed, we were not aware of any data that is not measured and calculated in accordance with the reporting standards of sustainability reports.

#### 4. Independency

We, as a member of the Ernst & Young ShinNihon Group, comply with the "Certified Public Accountant Law", "Ethics Regulation" of the Japanese Institute of Certified Public Accountants; and the "Ethics Procedure" of Ernst & Young ShinNihon. Therefore, there has been no interest to be noted between the Company and us.

Akihiro Nakagome  
Representative Director  
Shin Nihon Environmental and Quality Management Research Institute Co., Ltd.

Note: This Independent Assurance Report was prepared as a translation of the original Japanese version.



"ecoMOTION" is Yokohama Rubber's slogan for the various environmental activities being pursued by the Yokohama Rubber Group. It was adopted in December 2006.

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