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.

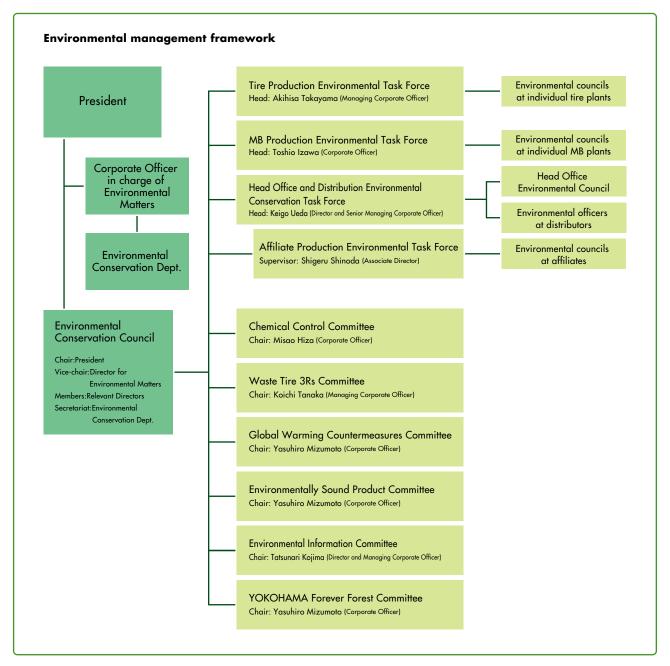
- Activities will be undertaken to gain the understanding of people within and outside the company concerning our practice of environmental management and achievements.
- · Action will be pursued to take into consideration the views of everyone who plays a part in supporting the activities of the Yokohama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

Japan:

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

Overseas:

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

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.



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.

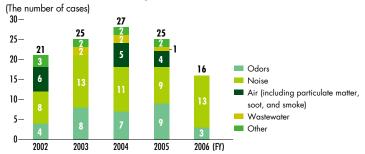
Breakdown of emergency scenarios (the numbers of cases)

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





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 2000 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"?

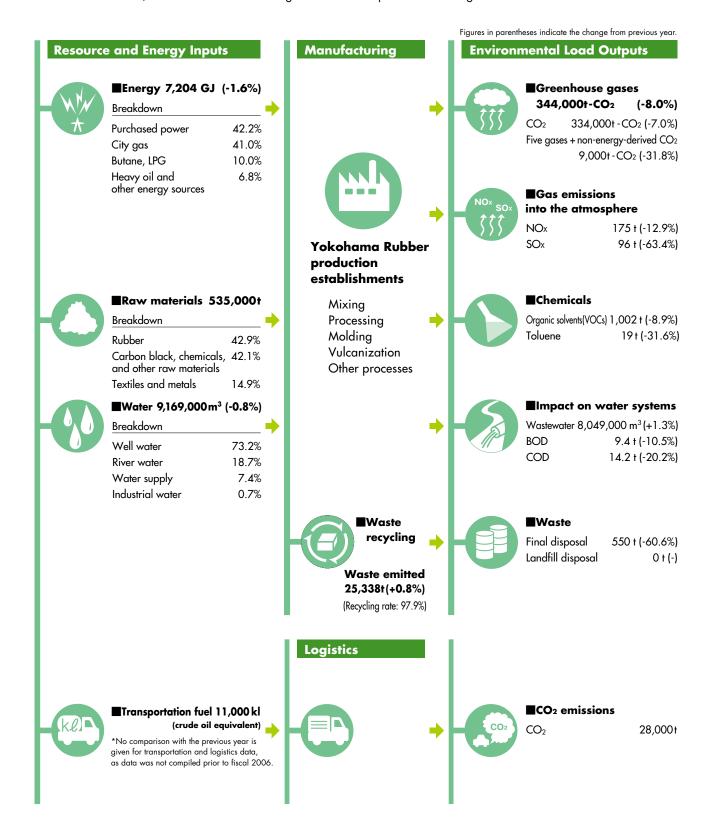
"Black Illumination" is a campaign launched in 2003 at the urging of the Japanese Ministry of the Environment with the aim of encouraging people to switch off electricity and in the process think more about the issue of global warming. It is undertaken during Environment Month every June; for two hours 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).

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.



Medium to Long-range Environmental Plans

State of Progress in FY2006

*Assessment of state of progress: FY2006 targets achieved by the entire companyare marked by a circle (0), and targets that were not achieved are marked by a cross (x).

	Chall		narked by a circle (O), and targets that were not achieved are n	, II	Page in this report
	Chall	enges	FY2006	Progress*	this report
ment	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).	0	16
Improvement and Innovation of Environmental Management			Familiarization of all group companies with environmental policy.	0	
	Delivery of environmentally	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.	0	
	sound products		Quantification of "pioneers" \Rightarrow quantification of definition.		22
	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.	O 32	
Enviro			Completion of measures in compliance with amended Law Concerning the Rationalization of Energy Use. Development and announcement of system to calculate CO2 emissions from logistics operations as a "specified shipper."	0	0
n of	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.	0	16
novatic	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).	0	15
n P	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.	0	38
ent a	Promotion of green procurement	Meeting of standards sought by auto industry.	Entry into effect of revised Green Procurement Guidelines.	0	36
vem	Contribution to environment and society	Creation of urban woodland (for relaxation, safety in emergencies, and adding to town character).	YOKOHAMA Forever Forest project.	_	52
pro	,	Involvement in World Wide Fund for Nature (WWF).	Membership of WWF Japan (corporate member).	0	50
<u>E</u>	Assessment of level of environmental management practices	Launch of Eco Award (promotion of environmental management practices by individual divisions).	First Eco Award ceremony held.	0	12
	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.	×	
92	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.	0	31	
E E			97.9% recycling rate (target: 98.0%).	×	
of Environmental Performance	Reduction of emissions of organic solvents (base year for organic solvents containing	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.	0	37
ē	toluene and rubber = 2000,	Reduction of emissions of trichloroethylene in aircraft products.	Development of cleaning system using substitute for trichloroethylene.	×	
ironr	base year for halogen-based organic solvents = 1995)	Reduction of emission of HCFC-141b in aircraft products	Development of cleaning system using substitute for HCFC-141b.	0	
ıt of Env	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		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.	0	32
Je		Concerning the Rationalization of Energy Use.	Completion of appointment of energy managers.	0	
Improvement	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 ₂ emissions.	0	34
lm rd m	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.	0	_
	Navy de allamas :	Preservation of water resources.		-	
	New challenges	Maintenance and improvement of wastewater quality Contribution to prevention of atmospheric pollution.		-	_
		Contribution to prevention of dimospheric politilon.			
al Risk	Arrangements for control of "substances of concern" (SOCs)	Creation of control system capable of meeting auto industry demands (REACH registration, compliance with EIV 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).	0	37
3nt		PRTR: Controlled based on safety impact indicator.	Disclosure of data on safety impact indicator data on individual plants.	0	
Ë		Asbestos: Prevention of damage to employees' health.	Comprehensive investigation of installation in buildings.	Ŏ	10
Minimization of Environmental Risk	Control of chemicals	Atmospheric pollutants: Targets in excess of VOC standards voluntarily adopted by industry.	Compliance with Air Pollution Control Law.	0	37
	Cormoi or crienticals	PCBs: Proper storage and control (including amalgamated companies).	Presentation of application for prompt treatment.	0	31
		Type I monitored chemicals: Establishment of handling of voluntarily regulated "chemicals."	Restructuring of internal control mechanisms.	0	_
izo	Prevention of water and soil pollution	Coexistence with surrounding communities made top priority.	Confirmation of non-pollution by observation well method at all plants.	0	35
.⊑	Prevention of noise and odors	Minimization of sensory nuisance.	Total of 16 complaints compared with target of 15.	×	17
- <u>Ş</u>		Promotion of mutual understanding with local communities.	Regular risk communication.	0	
	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.	0	31

Plans for FY2007 Onward

Phase I (FY2007-2008)	Phase II (FY2009-2011)	Situation in FY2017 (Phases Ⅲ-IV)		
ISO14001 certification of domestic and foreign production operations and implementation of environmental management practices [self-assessment] in accordance with GD100 environmental guidelines by non-production operations by FY2008. Appropriate disclosure of environmental information by all operations. Organization of global environmental conference.	Accreditation as an integrated environmental management system (EMS), including global organization, and entrenchment of consistent environmental management as work framework.	Corporate social responsibility (CSR) and environmental management objectives and attainment metrics adopted as industry benchmarks. All production operations worldwide have introduced ISO26000 systems and practice consistent CSR.		
All newly developed products to be environmentally sound products. Implementation of LCA in accordance with auto industry demands. Expansion of LCA-compliant lineup.	80% of products sold to be environmentally sound products. Real-world application of LCA assessment to MB products. Expansion of LCA database (for automakers).	Implementation and entrenchment of global LCA activities. All products to be environmentally sound products.		
Publication of data on emissions of six greenhouse gases (aggregate data for all consolidated affiliates in Japan). Continuation of activities to achieve 1% year-on-year improvement in e/t. 12% cut in greenhouse gas emissions compared with 1990 through introduction of CGS and continuation of high-efficiency operation.	Compliance with 2008 revision to Kyoto Protocol. Continued 12% cut compared with 1990 by group companies in Japan (2010). Continued improvement in e/t. 5% cut in CO ₂ emissions from logistics operations compared with 2005 in FY2010.	Formulation and implementation of plan to cut greenhouse gas emissions (including by overseas operations). Completion of compliance with 2nd Kyoto Protocol. Activities to lower greenhouse gas emissions (promotion of secondary energy conversion combined with energy conservation activities). Investment in CDM and contribution to lowering of global emissions of greenhouse gases.		
Improvement of level of internal audits by maintaining competency of internal auditors (170).	Training in environmental matters for all employees via e-learning system. Training of auditing personnel and spin-off to form separate company.	Training of human resources necessary for global environmental management. Training of overseas staff in CSR and environmental matters. Cooperation and support for environmental education in other countries and regions.		
Inauguration of Environmental Information Committee and enhancement of activities. Creation of database of performance data. Publication of reports for overseas stakeholders.	Publication of reports for overseas stakeholders. Development of database of information on environmental legislation overseas.	Risk communication with residents around overseas operations. Mechanisms for incorporating views of third parties into CSR and environmental management practices.		
Improvement of level of management of waste tire collection operations. Successful development of 3R technologies for waste tires.	Collection of waste tires equivalent to volume of sales (JATMA). Improvement of own disposal rate through reduction, reuse, and recycling of waste tires.	Participation in waste tire management network (to eliminate illegal dumping globally). Attainment of processing of 30,000 of waste tires annually. Development of new 3R technologies.		
Application of revised Green Procurement Guidelines. Horizontal expansion of green procurement to overseas production operations.	Compliance with new standards (e.g., REACH). Introduction of system of accreditation of green suppliers.	Attainment of green procurement rates of at least 95% in Japan and 90% overseas. Green procurement rates of 100% in Japan and 95% overseas.		
Planting of woodland (tree-planting event at Hiratsuka Factory in 1	Continuation of tree-planting and nurturing events.	Unveiling of woodland.		
Creation of volunteer leave system to make it easier for individual. Development, improvement, and operation of Eco Award scheme.	s to take part in community activities.	Conferment of special centenary award.		
Assessment of level of environmental management of divisions.	Environmental factory/office certification (linked to division assessment).			
35% reduction from FY1996 by end FY2008. Waste management at overseas production operations.	55% reduction from 1996 by end FY2011. MBO of emissions by overseas production operations. Attainment of emission factor equivalent to FY2001.	Migration to emission factor management of industrial waste. Establishment of emission factor with 2011 as base year (target of 1-6% year-on-year reduction). Maintenance of waste emissions at overseas production plants at level in 2008.		
Continuation of zero emission of landfill waste. Establishment of system of verification of final disposal and recycling of industrial waste. Attainment of 99.0% recycling rate.	Attainment of zero emission of landfill waste by overseas production operations. Complete recycling of landfill waste and operation of system of verification of recycling processing sites.	100% recycling by all production operations worldwide. Attainment and maintenance of 2% reduction in cost of disposal of industrial waste.		
Reduction of toluene emissions (80% reduction from 2000).	90% reduction in toluene emissions from 2000.	Reduction of emissions of other PRTR substances (target: under 1 t/year of each substance).		
50% reduction from 2000 in emissions of organic solvents containing rubber.	55% reduction in emissions in organic solvents containing rubber compared with 2000.	60% reduction compared with emissions in 2000 by FY2017.		
Target of "0 t/month" by Sep. 2007. Target of "0 t/month" by Sep. 2007. Action on voluntary elimination of CFC use in manufacturing in 2008.	Action to lower safety impact of Hiratsuka Factory to "5-VIII" category.			
Deployment of CGS at domestic tire plants (introduced at Shinshiro Plant in FY2007). Targets for attainment in FY2008 compared with 1990: 10% reduction in greenhouse gas emissions, 15% reduction in unit energy greenhouse gas emissions, 2% improvement in energy efficiency.	Compliance with first Kyoto Protocol. Targets for attainment in FY2010 compared with 1990: 12% reduction in greenhouse gas emissions. Compilation and disclosure of data on greenhouse gas emissions by overseas production establishments.	Compliance with second Kyoto Protocol. "CO2 emission = energy-saving activities x fuel conversion" bifactoral analysis and its improvement. Compilation and disclosure of data on CO2 emissions by key consolidated manufuctures.		
Fulfillment of responsibilities as a specified shipper. 1% improvement in emission factors compared with previous year.	5% reduction in CO ₂ emissions from logistics operations in 2010 compared with 2005.	Compliance with second Kyoto Protocol.		
1% improvement from previous year in e/t.	Establishment of system for compiling data on greenhouse gas emissions by overseas distributors.	Action to achieve target of 1% improvement from previous year in e/t of overseas distributors. Compliance with second Kyoto Protocol.		
Introduction of MBO for water intake and discharge. Introduction of MBO for BOD/COD.				
Introduction of MBO for NOx/SOx emissions.				
Horizontal internal application of guidelines and global implementation (FY2007). Launch and completion of REACH preliminary registration. Global implementation of MS-InC (FY2008).	Establishment of monitoring framework in collaboration with supp 1) Guidelines on control of chemicals contained in products (2) Guidelines on prohibited and restricted substances (revisio 3) Revision of Green Procurement Guidelines and application (REACH compliance: 2009)	2009) n of environmental control standards)		
	gory "5-VIII" at all domestic production sites.	Control of PRTR substances at overseas production operations.		
Formulation and implementation of plans for elimination.				
Action based on voluntary VOC limits.				
Formulation of plans for disposal.	Swift disposal in consultation with disposal contractors.			
Action to guarantee zero off-site discharge.	Soil Pollution Prevention Law: Facilities using specified harmful substances.	Action to achieve zero complaint		
Total number of complaints: not more than 10. Risk communication of	Total number of complaints: not more than 10. It overseas operations.	Action to achieve zero complaints.		
Formulation and implementation of guidelines for management of overseas contractors.	Auditing of recycling contractors (including overseas).	Supervision and auditing of level of legal compliance of contractors. Attainment of zero illegal dumping.		