

## Top Message

# Aiming for the Highest Customer Satisfaction, Lion Promotes CSR Management

## Lion's Corporate Social Responsibility (CSR)

The improvement of people's daily lives through the production of high-quality products is one of Lion Corporation's most important CSR activities. This is implemented by placing the highest priority on customer satisfaction and ceaselessly developing technological innovations, in tandem with the creation of a wide range of superior products.

Lion has established three visions in order to fulfill this responsibility Companywide: become "the leading company in the new comfortable lifestyle support industry"; become "a leading company in environmental friendliness"; and "activate a corporate culture of tenacity, creativity and learning."

## New Comfortable Lifestyle Support Industry

Lion defines "the new comfortable lifestyle support industry" as one that provides ideas for developing positive daily habits to help people live fulfilling and happy lives. Presently, the overall market is divided into three sectors—toiletries, over-the-counter (OTC) drugs and functional food products—which are worth in excess of ¥3 trillion. It is in these sectors that Lion Corporation can use its management resources most effectively.

Previously, Lion's social mission focused on promoting the idea of cleanliness and health. Currently, however, no mission is more important than helping people lead fulfilling lives, undertaking activities to further improve daily life and responding to the needs of those who want to lead happy lives. From being leaders in the culture of cleanliness and health to becoming leaders in the culture of comfortable lifestyles, Lion aims to be the number one company in the industry.

## ECO LION Activities

Lion's Companywide environmental protection initiatives are organized into five main areas: "reducing greenhouse gas emissions," "effectively using and recycling resources," "considering the environment from a product-oriented perspective," "appropriately handling chemical substances," and "fostering environmental awareness within the Lion Group."

The concept of "considering the environment from a product-oriented perspective" involves the Lion Eco

Standards. Established in 2006, these standards are based on the perspective of undertaking a "lifecycle assessment" that evaluates environmental burden across the entire lifecycle of products. Utilizing the Lion Eco Standards, Lion Corporation is actively developing products that take the environment into consideration.

"Reducing greenhouse gas emissions" involves a further reduction of CO<sub>2</sub> emissions, not only in business operations, but also during product usage. Owing to a higher ratio of plant-based ingredients used in our lineup of laundry detergents, Lion Corporation has been able to substantially reduce CO<sub>2</sub> emissions of its products used in the home. Reductions in greenhouse gas emissions in 2007, which takes into account combined CO<sub>2</sub> emissions from both business activities and product use in the home, were 37% below 1990 levels. This compares favorably with the 6% reduction of CO<sub>2</sub> emissions compared with 1990 levels that was mandated for Japan in the Kyoto Protocol.

In recognition of these efforts, Lion Corporation was presented with the 16th Grand Prize for the Global Environment Award in April 2007, further encouraging all Lion employees. Going beyond the Kyoto Protocol, this year Lion also established the challenging goal of reducing CO<sub>2</sub> emissions by 67% of 1990 levels by 2020.

## Invigorating Lion's Corporate Culture

Striving to maintain the spirit of tenacity and creativity as an important management philosophy, Lion is taking measures to foster a climate of renewed enthusiasm by encouraging all employees to carry out their jobs boldly.

Initiatives to energize employee enthusiasm include introducing funding for research and activities that promote innovative ideas to develop specific businesses operations. In addition, an in-house contest has been held involving teams drawn from each department. The contest awards suggestions related to a variety of themes that are not directly connected to employees' regular duties. In order for employees to work to their full potential, Lion is also demonstrating its commitment to an improved work/life balance through such measures as improving childcare systems.

## The Voluntary Recall of Varsan Hyosatsu Jet Spray

Varsan Hyosatsu Jet Spray was introduced to the market in the spring of 2007 to favorable reviews. Several cases of combustion occurred despite Lion's proactive attempts to heighten consumer awareness of the risk of combustion when this product is used in proximity to open flames or sparks. Such actions included placing warning seals directly on products, as well as publicizing these warnings via television, newspapers and the Company website. Placing the highest priority possible on customer safety, Lion Corporation decided to implement a voluntary recall of this product to prevent further accidents. These incidents made it clear that the use of the term "hyosatsu" (ice kill), in combination with this product's insecticide-free characteristics, further undermined warnings related to its flammability.

As a company that places the highest priority on customer satisfaction, Lion will continue to improve products from the perspective of customers instead of suppliers, as it continues to make concerted companywide efforts to strengthen the trust that has been placed in it by customers.

## The Vision of Lion's CSR Activities Moving towards the Future

I believe that the future vision of Lion's CSR activities involves fostering a greater degree of communication with all its stakeholders, beginning with customers. Making efforts to seriously consider customer feedback and reflect this in our business operations is an important issue for Lion Corporation. Coupled with considering information received from those departments that make direct contact with customers seriously, we are taking steps to encourage further dialogue with stakeholders.

In addition, based on the commercialization of the plant-based surfactant methyl ester sulfonate (MES), which is derived from palm oil, Lion's CSR activities are being extended to raw materials procurement overseas. At the same time, Lion is strengthening ties among affiliated companies overseas with regard to CSR.

In order to ceaselessly improve activities to maintain customer satisfaction, as well as to fulfill the trust and expectations of our stakeholders, Lion Corporation will continue to advance its CSR activities.

President and Chief Executive Officer

*Sadayoshi Fujishige*



Lion's Activities to Prevent Global Warming

## Promoting methyl ester sulfonate (MES) surfactants as the standard ingredient for detergents worldwide!

### Considering the Environment by Using MES

The plant-based surfactant

# MES

MES, the washing components of such Lion laundry detergents as TOP, is a surfactant derived from palm oil.



#### Preventing Global Warming

#### MES Is Carbon Neutral

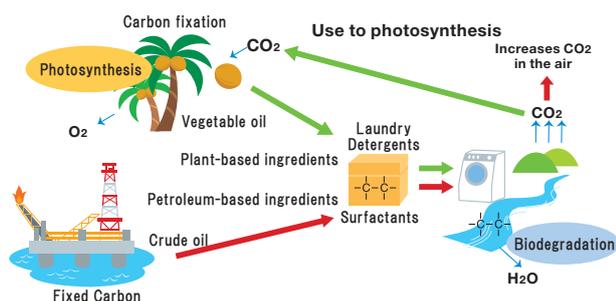
Surfactants, one of the raw materials used in laundry detergents, contain carbon (C). After use, surfactants are biodegraded in the environment to become carbon dioxide (CO<sub>2</sub>) and water.

Both plant- and petroleum-based laundry detergents contain carbon and therefore biodegrade in the same manner, resulting in CO<sub>2</sub> emissions. However, even though plant-based surfactants emit CO<sub>2</sub> as they biodegrade, there is no increase in the total volume of CO<sub>2</sub> emitted into the atmosphere because plants grow by absorbing CO<sub>2</sub> and solar energy (carbon neutral).

This means that plant-based detergent MES do not add to the total amount of CO<sub>2</sub> in the atmosphere, despite CO<sub>2</sub> being emitted while it decomposes after use.

Compared with CO<sub>2</sub> emissions produced by petroleum-based High Top laundry detergent in 1990, Top, which was released on to the market in 2006, can cut CO<sub>2</sub> by 47% (figures calculated by means of Life Cycle Assessment [LCA]\*<sup>1</sup>).

#### Carbon Neutral

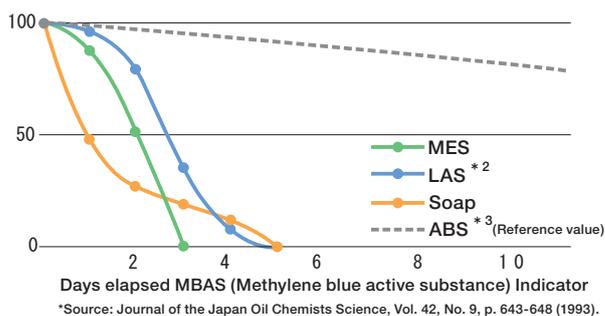


#### Considering the Aquatic Environment

#### MES Features Superior Biodegradability

Surfactants disposed into the environment after use are decomposed (biodegraded) into CO<sub>2</sub>, water and other inorganic substances by microorganisms. MES biodegrades easily and does not remain in the environment for a long time.

#### Biodegradation of Surfactants



#### The High Detergency of MES

A smaller amount of detergents that feature high detergency are required per load of laundry, making it possible to reduce the amount of organic matter released. Consequently, the overall load on the aquatic environment is reduced. Blended with high detergency MES, the present version of Top laundry detergent releases only one-fifth the volume of organic substances per load of laundry compared with powdered soaps.

In addition, MES is also compatible with enzymes that break down grime, enhancing its detergency even further.

\* 1 Life Cycle Assessment: A method of quantitatively measuring environmental impact of the entire product life cycle, from raw materials procurement to manufacturing and disposal.

\* 2 LAS: Readily biodegradable surfactant linear alkylbenzene sulfonate

\* 3 ABS: Branched alkylbenzene sulfonate, a surfactant that is highly resistant to biodegradation

# Releasing MES on to the World Detergent Markets!

Committed to being a leading company in environmental friendliness, Lion Corporation is taking steps in achieving a sustainable, recycling-oriented society by supplying superior MES to the world detergent market, with the goal of making this a standard ingredient in detergents worldwide.

In June 2007, Lion established Lion Eco Chemicals Sdn. Bhd. as an overseas manufacturing and sales subsidiary in Malaysia, with total expenditures projected to exceed ¥10

billion. This subsidiary is expected to produce 100,000 tons of MES annually—a quantity equivalent to approximately one million tons of laundry detergent—and the first phase of manufacturing will start in December 2008. By utilizing plant-based MES, it is possible to reduce CO<sub>2</sub> emissions, the cause of global warming.

## Aiming to Achieve Sustainable Procurement of Palm Oil

### Towards Realizing a Sustainable Supply

In 2006, Lion Corporation became a member of the Roundtable on Sustainable Palm Oil (RSPO) and sends a representative to the Annual Roundtable of the RSPO held every fall, at which an exchange of opinions is conducted. In addition, Lion began providing technical support related to the refinement and effective utilization of palm oil to the government-owned Palm Oil Research Institute of Malaysia (PORIM) and the Malaysia Palm Oil Board (MPOB) as early as the 1980s.

At the 5th Annual Roundtable of the RSPO held in Kuala Lumpur in November 2007, the principles and criteria for sustainable palm oil production (plantation management criteria) were confirmed after a two-year test. Based on this, certification audits of plantations and distribution of RSPO-certified sustainable palm oil began in 2008. In anticipation of these actions taken by the RSPO, Lion implemented an independent audit of supplier plantations in May 2007.

In response to the possible future depletion of such finite natural resources as petroleum, renewable resources are available owing to the cultivation of plants, which are effective in the fight against global warming owing to their carbon-neutral effect. Lion's use of palm oil will continue in the future as a useful alternative to fossil-based natural resources due to its superior level of yield.

### Resolving Issues Related to Procurement of Palm Oil

With total worldwide production standing at approximately 38 million tons per year, palm oil production has exceeded all other fats and oils. Approximately 80% of palm oil is used as cooking oil,

margarine and shortening, with the remainder used as industrial raw materials. As the world's population continues to increase, the global food supply is expected to become even more strained in the near future. In order to meet the increased demand from developing countries such as China and India, in particular, it is believed that the volume of palm oil production, which has a high rate of yield, will continue to expand in the coming years.

However, various environmental and social problems such as the clearing of tropical rain forests and the shrinking of wildlife habitats stemming from the creation of new plantations, as well as poor working conditions, are becoming evident.

In light of such conditions at these areas of production, Lion Corporation is working to maintain a responsible procurement of palm oil through actions that promote adequate management among suppliers—following the RSPO's criteria for plantation management—as well as through activities undertaken by the RSPO.



Audits of plantations

# In Order to Deliver Safe Products to Customers:

## Upgrading safety systems and strengthening product safety evaluation capabilities in compliance with amendments to the Consumer Product Safety Law

### Systems that Ensure Safety

Lion Corporation is endeavoring to further expand product safety by integrating information regarding problems with products and services, establishing an accident reporting system, and upgrading communication systems.

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#### Integrating Information Aiming for a Rapid Response

The Consumer Service Office compiles all relevant information related to such inquiries as products defects, services-related problems and problems related to competitor products, and it oversees the integration of this information and initiates responses.

The Consumer Service Office classifies information it receives related to problems by level of importance, and a quick response is initiated that includes the appropriate dissemination of information and issuance of product accident reports.

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#### Establishing an Accident Reporting System Aiming to Prevent Increases in Product-Related Accidents

In accordance with revisions to the Consumer Product Safety Law (May 2007), the goal of which is to prevent the spread of damage resulting from product accidents, Lion Corporation established a system to facilitate rapid reporting to relevant government agencies and customers and to execute necessary responses if problems related to Lion products should occur. In the event of a major accident, top management is immediately informed and procedures for rapid decision-making are implemented.

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#### Notification System Maintenance Striving to Increase Product Safety

In light of recent cases of food mislabeling, Lion established an internal communications system known as the “Quality Information Hotline,” which facilitates reporting of suspected product-related problems and accidents. Intended to prevent product defects and accidents, this system is maintained by investigating the speed of responses by relevant departments to information obtained, wherein necessary improvement measures are implemented. In addition, absolutely no detrimental effects are incurred by personnel that use this system to inform the Company about product-related problems.

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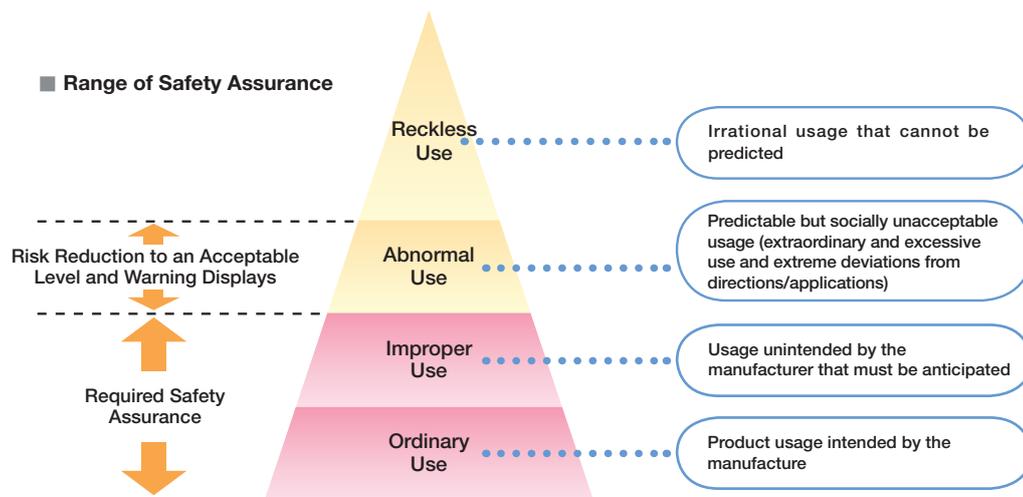
# Evaluating Safety from the Customer's Perspective

Aiming to make safety a top priority during product development, safety evaluations are undertaken from a consumer-science standpoint that factors in customer viewpoints. This is in addition to regular safety evaluations conducted from a more specialized outlook. Such safety evaluations are important given that there are cases where consumers use products in ways not intended by the manufacturer, and product usage occasionally exceeds socially accepted norms. In order to ensure customer safety during a wide range of product uses, evaluations based on the following structure are conducted.

**1** Regarding products under development, in addition to evaluations undertaken by development personnel, a specialized development support department conducts evaluations from a customer-oriented perspective. Through this evaluation, development personnel are better able to understand and foresee possible product uses by customers that fall outside a product's intended use.

**2** In the following chart, anticipated usage is classified into four separate categories: ordinary use, improper use, abnormal use and reckless use. Predictions of danger and harm can be formulated based on these use classifications.

**3** Ensuring customer safety is essential not only during ordinary use, but during improper use as well. For abnormal product use also, it is important to determine whether risks can be reduced, what level of risk is acceptable and readjust a product's design accordingly. Product safety is enhanced as much as possible by reducing risks to acceptable levels and providing warning displays, all of which allows customers to use Lion products reliably.



## The Voluntary Recall of Varsan Hyosatsu Jet Spray

Varsan Hyosatsu Jet Spray for Flying Bugs and Varsan Hyosatsu Jet Spray for Creeping Bugs were released to the market in March 2007 based on the revolutionary idea of a bug spray product that contains no insecticides and utilizes a spray of minus 40 degrees to freeze and kill insects. Despite receiving favorable reviews, several cases of combustion occurred involving this product.

In order to ensure that this product was used safely, product flammability and high temperature exposure warnings were displayed in accordance with the High Pressure Gas Safety Law for aerosol products. In addition, actions implemented to handle this situation included attaching warning seals directly to products, as well as announcing warnings via television, newspapers and the Lion website. However, due to the extreme difficulty related to eliminating these accidents, a voluntary recall of Varsan Hyosatsu Jet Spray products was initiated on August 27, 2007. Placing the highest priority on customer safety, Lion viewed this action as the best way to prevent further incidents.

As of the end of March 2008, recall notifications were issued three times and 1,460,000 spray cans have been returned (45.1% return rate), with five major accidents and 27 minor incidents reported to the government.

# Lion Conducts CSR Activities and Values Its Dialogues with Stakeholders

Lion's fundamental concept of CSR activities is to fulfill its social responsibilities through its corporate activities. Lion will improve its CSR activities in accordance with social changes, while respecting dialogues with stakeholders.

## Lion's Approach to CSR

Guided by its company motto and management philosophy, Lion has worked diligently since its inception in every facet of its business activities to become a trusted member of society. The concept behind CSR—corporate social responsibility—comes naturally for Lion Corporation, and its CSR policies closely follow changes that occur in society.

In January 2003, we announced our Compliance Declaration and formulated the Lion-Group Charter for Corporate Behavior. Built on 10 principles, this Charter enables us to maintain a positive influence on society. With the aim of clarifying the Company's responsibilities to stakeholders and further strengthening its CSR activities, Lion established the CSR Promotion Department in March 2005. In its new VIP II 09 medium-term management plan launched in 2005, Lion positions proactive CSR activities as an essential factor in achieving the Company's ultimate goal of increasing corporate value. Initiatives included in VIP II 09 call for the establishment of in-house CSR promotion systems and structures, vigorous environmental activities and continued contribution to the local culture and community.

In January 2008, to reflect changes in society, the Lion-Group Charter for Corporate Behavior\* was revised, and in the Behavior Guidelines, company attitudes towards a variety of activities including the provision of reliable and safe products and services, and environmental issues were further clarified.

\* HP: Lion-Group Charter for Corporate Behavior  
<http://www.lion.co.jp/en/company/html/com0201f.htm>

effective supervision, and securing compliance. It is our strong belief that reinforcing and improving the corporate governance system will bring to fruition an increase in corporate value.

## Corporate Governance System

Lion has adopted an audit system to ensure adequate management supervision. Lion has adopted an audit system to ensure adequate management supervision. In March 2004, the Company introduced an executive officer system, separating the executive and supervisory functions. Under the new system, the Board of Directors is responsible for decision-making and management supervision, while the Executive Committee is responsible for job execution. In order to revitalize the Board of Directors and to enhance energy and agility, the number of directors was reduced from 19 to 11. Along with this, Lion implemented other measures in March 2006 that include the appointment of two external directors and a reduction of the director's term of office. Lion has appointed two standing auditors and two external corporate auditors. Furthermore, Lion established the Management Evaluation Committee in October 2003 as a means of securing and incorporating the opinions and advice of outside experts.

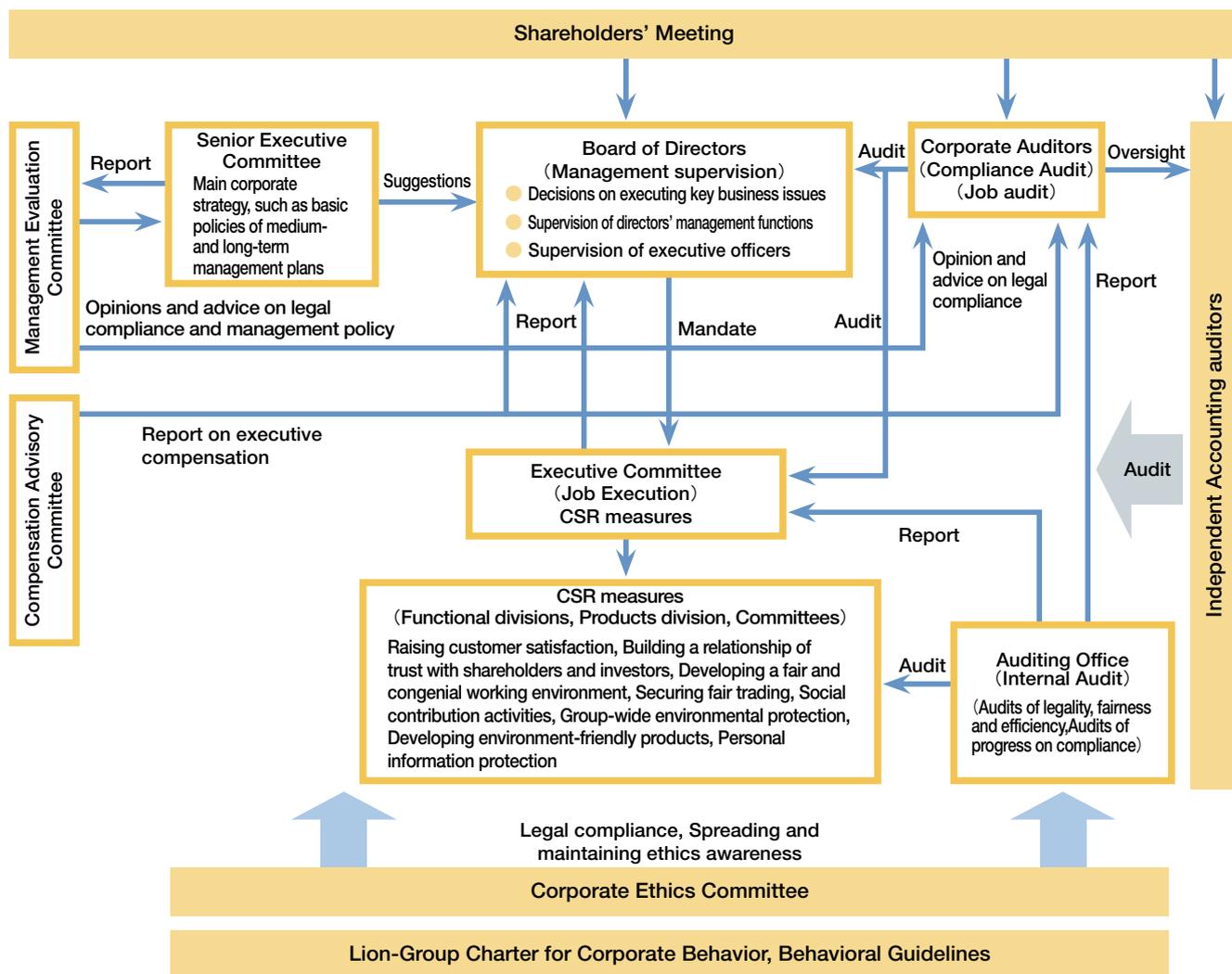
Following ratification at the annual general meeting of shareholders held on March 30, 2006, Lion adopted a proposal concerning the issue of subscription rights for the purpose of introducing a trust-type rights plan. This proposal has been introduced as a restraining measure against attempts to acquire or purchase more than 20% of Lion's stock without the prior consent of the Board of Directors.

In addition, Lion established the Compensation Advisory Committee, which is comprised of external directors and external corporate auditors, in December 2006 for the purpose of enhancing objectivity and clarity in matters concerning executive compensation.

## Corporate Governance

### Fundamental Approach

Lion places the highest priority on enhancing management transparency, ensuring prompt decision-making and



## Development of Internal Control System

In accordance with the Corporation Law and the Enforcement Regulations of the Corporation Law, Lion improved the following systems in order to secure appropriateness in the Group's business activities.

1. A structure to ensure that the executive duties of directors and employees comply with legal requirements and the Company's Articles of Incorporation
2. Management structure relating to information maintenance and storage of matters concerning the execution of directors' duties
3. Rules and other structures for managing the risk of loss
4. A structure to ensure that directors' duties are executed efficiently
5. A structure to secure maximum efficacy as a corporate group
6. Matters relating to employees and the independence of employees from directors in support of corporate auditors in the case that auditors request such employees
7. A structure for reporting to corporate auditors by directors and employees and other matters relating to reporting procedures to corporate auditors
8. A structure to ensure effective auditing by corporate auditors

## The Internal Control System Regarding the Financial Results Report

Lion Corporation will apply evaluating and auditing systems within the internal control system related to the financial results report, based on the Financial Instruments and Exchange Act, at the beginning of the financial year in January 2009. With the purpose of this system being to ensure the reliability of the consolidated base of financial results reports, Lion formulated a special task force team in July 2006, under the president's direction, to further controls on a company-wide level within the Lion Corporation and the Lion Group, as well as job-process-level controls for operational maintenance. In addition, an internal control managing director position within the Auditing Office was established in January 2008 as an evaluation body under the direct control of the president. Upon completion of its preliminary assessment in 2008, the Company will initiate the operations of this new system in January 2009.

## Providing Products that Are Worry-free and Bring Fresh Excitement to Customers

Lion strives to provide products that instill customers with a feeling of reliability, assurance and satisfaction during purchase and use, and will become preferred products over the long term. In March 2008, the spirit of the Lion company motto and management philosophy was clearly expressed as a quality policy.



### Quality Policy

The mission of Lion Corporation is to provide superior products and services that are useful in daily life, while achieving customer satisfaction and trust. Ceaselessly implementing quality assurance activities, the Company is striving to increase customer satisfaction.

#### 1. The importance of customer communication

The serious consideration given to customer comments is reflected in Lion's products and services. Along with gathering information related to quality, Lion provides information that is accurate and easy to understand.

#### 2. Lion thoroughly pursues safety and functionality in all of its products

Thoroughly pursuing safety features, Lion is actively engaged in improving product capabilities.

#### 3. Considering the Global Environment

Reducing the burden of products and services on the global environment, Lion is aiming to create a sustainable society.

#### 4. Compliance with Laws and Regulations

Complying with related laws and internal company regulations, Lion is improving its quality assurance activities.

#### 5. Providing products and services that are full of fresh surprises

By ceaselessly engaging in the creation of attractive products, Lion is working to increase customer satisfaction.

March 28, 2008

### Establishment of the Quality Assurance Office

Lion Corporation emphasizes safety as the most important aspect of quality. In the wake of the Hyosatsu Jet combustion incidents that occurred in 2007, while the Product Development Department conducts product quality evaluations, it is important to note that the Quality Assurance Office, which was established in January 2008, provides support, guidance and advice especially related to evaluating whether products are safe when used in a variety of ways. Lion is aiming to further bolster safety during product use by developing a system that, in contrast to the standpoint of the Product Development Department, evaluates actual usage from the customer's perspective and anticipates product usages that are incorrect or even abnormal.



Meeting to investigate product safety held at Lion's test kitchen

## Quality Assurance Process

### Planning Stage

Market analysis and other factors allow Lion to gain a precise grasp of customer needs and wants, leading to new product concept proposals. In order to realize these, the Company sets quality targets for the design and development of specific products. Simultaneously, product proposals are screened in a series of meetings, taking all possible angles into account, and upon approval are moved to the development stage.

### Development Stage

The Research and Development Division reconciles quality targets that reflect customer needs with technological characteristics, establishes design quality, and develops the products. Products are evaluated by each responsible department in accordance with product design quality according to the “seven fundamental items” and from the perspective of the customer to determine if these will provide customer satisfaction.

1. Safety
2. Good performance and functionality
3. Ease of use
4. Design appearance
5. Environmental suitability
6. Stability
7. Compliance with legal and internal company standards

### Manufacturing Stage

In order to ensure that products are manufactured with uniform product design quality that is consistently maintained in a factory environment, the Production Division initiates manufacturing processes that are overseen diligently at factories. Lion has implemented regular GMP (Good Manufacturing Practices) surveys, while bolstering quality management systems at plants that produce pharmaceutical products (drugs, quasi-drugs and cosmetics). In addition, the Production Division records lot numbers for each product that give the date and location of manufacture in order for Lion to ensure traceability.

### Marketing Stage

Product freshness is thoroughly managed by setting each product's shipment date in order to make it easier for customers to use products prior to the best-before date. We monitor a product's sales status and reflect customer opinions sincerely in terms of further product improvement and development. In addition, the Customer Service Division prepares a system to respond to unexpected trouble.

## Responding to Customer comments

Lion receives a wide variety of opinions, inquiries and complaints from customers who use its products.

Lion directly receives most of such customer inquiries at its Consumer Service Office, but the Company sometimes receives inquiries through retail stores and regional offices.

In the event that a quick response by responsible personnel at the Consumer Service Office is not possible, an investigation to determine causes as well as countermeasures is undertaken by the Quality Assurance Office in cooperation with the Research and Development Division, Production Division and the Product Planning Division. Following this, a report is sent to the customer. In some cases, Lion employees visit the customer's home to inquire about product problems and determine solutions.

In cases where the causes of product problems and complaints are difficult to determine or cannot be solved quickly, these matters are examined by promotion committees company-wide (CS/PL Committees), which relate to customer satisfaction and product liability. Following this, countermeasures are implemented until all problems and complaints are eliminated.

### Reflecting Each Customer's Voice in Product Development

Based on customer needs, which are determined by customer opinions and marketing surveys, improvements to existing products and new product development are undertaken. In order to enhance new product development, Lion also makes use of family observations conducted by the Behavioral Science Research Institute, facilitating an understanding of needs that customers themselves are unaware of.

Under the quality policy, formulated on Lion Corporation's product management system—based on ISO 9001 (JISQ 9001)—Lion products are managed by a process that clarifies assurance items and responsible departments.

### Internal Company System for Responding to Customer Inquiries



## Promoting Barrier-Free Measures

### Providing Product and Information for Daily Life to the Visually Impaired

To facilitate the reliable use of products by the visually impaired, the Lion Product Catalog is published in braille, SP code and large type print twice a year, and the “Lion Products and Lifestyle Information Oto (Audio) Mail,” an e-mail magazine that contains information useful for daily life, is issued four times a year, and is compatible with screen-reading software for the visually impaired. The catalog and magazine are distributed free of charge to all interested parties.

## To Maintain a Comfortable Workplace Where Employees Can Work Cheerfully

Respecting each employee's characteristics and motivation, Lion wishes to grow with employees. Based on its fair compensation system for employees, Lion continues to promote an optimal workplace environment for all employees, while fostering human resource development and a health support program for both mind and body.



### Ensuring a Comfortable Workplace

#### Balance between Work and Private Life

Lion values the balance between work and the private life of employees and improves workplace comfortability to bring tangible results. Given the declining birthrate in an aging society, nurturing the next generation is a pressing issue.

Having implemented its own action plan in compliance with the Next Generation Education and Support Promotion Act in 2005, Lion was certified as a "company that proactively engages in striking the balance between work and childcare" in April 2007, which allows the Company to utilize the "Kurumin" next generation certification mark in its corporate activities.

At present, 100% of Lion's eligible female employees and five male employees have acquired maternity leave.



Next generation certification mark

#### ■ Lion's Childcare Leave and Holiday Accumulation System

|  |   |
|--|---|
| Maternity leave                          | The eligible employee can acquire up to 18 months of leave until the child becomes three years old<br>The first two weeks of leave will be regarded as paid holidays<br>The eligible employee can acquire leave even if the employee's spouse serves as a full-time housekeeper |
| Shortened working hours due to childcare | The eligible employee can acquire the option until the employee's child enters school<br>The eligible employee can shorten working hours by up to two hours per day   |
| Leave to nurse sick children             | The eligible employee can acquire leave up to five days per year<br>The leave will be regarded as paid holidays   |
| Holiday Accumulation System              | The eligible employee can accumulate annual paid holidays of up to 60 days<br>The accumulated holidays can be used for eligible employees' health care and/or care for elderly family members   |

#### Retired Worker Reemployment System

In April 2006, Lion introduced two types of Retired Worker Reemployment Systems: In the "standard type," retired employees can choose the most suitable job from among a list of jobs offered by Lion; and in the "highly specialized type," Lion appoints certain retired employees who have indispensable knowledge and expertise for the position. In the two years since the establishment of the system, 60% of retired employees have used this system.

#### Providing a Workplace Environment that is Comfortable for All

Aiming to develop an appropriate work environment and efficient workflow, Lion monitors the employee's working hours on an objective basis (time card). In addition, Lion has established "zero overtime day" once a week by business site, encouraging employees to leave the office early to reduce working hours and energy consumption.

For office staff and R&D workers, Lion adopted a flextime system to allow employees to have a flexible and efficient work style.

#### ■ Employee-related Data (Lion)

|   |            | 2005  | 2006  | 2007  |
|---|------------|-------|-------|-------|
| Regular employee                                | Male       | 2,002 | 1,985 | 1,965 |
|   | Female     | 500   | 509   | 531   |
| New employee *1                                 | Male       | 125   | 90    | 133   |
|   | Female     | 22    | 32    | 35    |
| Retired employees reemployed                    | percentage | —     | 0.6   | 2.0   |
|   | person     | —     | 15    | 51    |
| Percentage of females                           |            | 20.0  | 20.4  | 21.3  |
| Female management-level staff                   | percentage | 2.9   | 3.3   | 4.3   |
|   | person     | 21    | 23    | 30    |
| Employment rate for handicapped employees       | percentage | 1.4   | 1.6   | 1.8   |
|   | person     | 34    | 39    | 45    |
| Turnover rate up to three years after hiring *2 | percentage | 8.0   | 2.9   | 7.9   |
|   | person     | 2     | 1     | 3     |
| Average amount of overtime per month (hours)    |            | 9.4   | 8.3   | 9.2   |
| Percentage of paid leave taken                  |            | 42.3  | 41.8  | 40.3  |

\*1 Including "new employees" hired mid-year

\*2 Revised investigation results and figures

## Spirit of Tenacity and Creativity—Human Resource Development

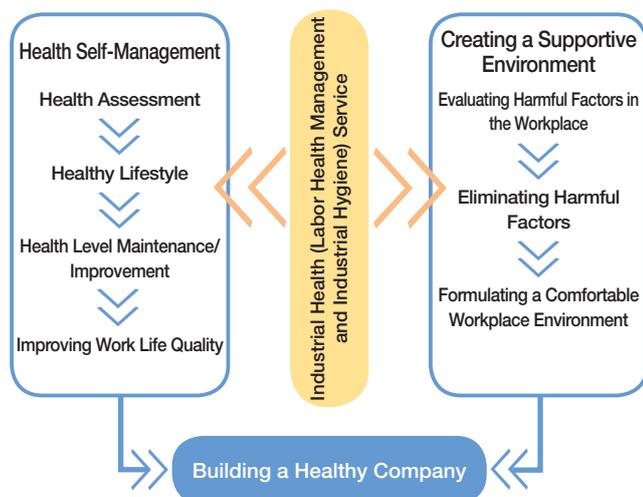
Lion provides diverse opportunities for employees to develop their abilities. Taking qualifications and age into consideration, they provide training at each level of employment, career development training, and specialized education. Lion also provides a variety of training programs, especially for motivated employees. These additional programs include elective training and support for self-development.

## Employee Health Management

### Employee Health is an Asset to Lion

Considering that employee health is the most important asset both for the individual and the Company, Lion is conducting activities based on the Fundamental Health Management Policy. Activities that promote an increase in the number of employees who can manage their own health as well as activities that build a comfortable workplace are key pillars of this policy. In addition to such measures as all employees participating in interviews following the results of health exams, Lion is developing finely tuned health management activities in consultation with industrial healthcare professionals.

#### ■ Outlining the Aim of Lion's Fundamental Health Management Policy



\*1 The ratio of employees who underwent annual health examinations in 2007: 100%

\*2 The ratio of post-examination interviews conducted and health guidance provided in 2006: 99.0%

## Responding to Specific Health Checkups and Specific Healthcare Advice

Regarding the measures for specific health checkups for individuals 40 years old or over and the provision of specific healthcare advice that was enacted into law in fiscal 2008, internal health nurses well acquainted with the Company's occupational circumstances provide specific healthcare advice to insured employees as well as striving to reduce the number of metabolic syndrome cases among these individuals. Lion's own health insurance association, Lion Blue Cross, is also responding to the needs of employee dependants by bolstering the current system of family health exams.

## Taking Action for Mental Health

Given that mental health is an important issue both in terms of a corporate organization's vitality and its risk-management strategies, Lion is making every effort to identify and prevent emotional problems among its employees. In fiscal 2007, not only did Lion continue to implement its internal industrial and mental health consultation system, the Company also contracted clinical psychotherapists to provide counseling to employees internally and counseling organizations to provide these services externally, making it possible for employees and their families to readily obtain counseling over the telephone and in person.

## Promotion of CSR Procurement together with Business Partners

Sharing the common goal of enhancing customer satisfaction, Lion has established close-knit, cooperative relationships with business partners. At the same time, the Company considers environmental and social issues as it strives to establish CSR procurement that stresses sustainability.

### Promoting Cooperative Relationships with Business Partners

#### Advancing CSR Procurement

For its raw material procurement and product purchasing, Lion is preparing supply chain management systems that reflect environmental and social concerns. During 2008, Lion will publish and release to the public its CSR-Based Procurement Principles, a revision to the Company's current Purchasing Activity Principles, which is an effort to consider social issues while carrying out procurement activities.

Furthermore, in order to fully grasp the status of supplier CSR, Lion is currently conducting a survey of suppliers with a questionnaire prepared using the Ten Principles of the Global Compact\* as a reference.

#### Working Together with Wholesalers and Retailers—Creating Sales Venues that Provide Customer Satisfaction

Encompassing the principle of “co-existence and coprosperity,” Lion's logistics policy is founded on close ties with wholesalers. Regarding the marketing of consumer products, the Company has established an organized structure to promote better communications. One feature of this structure is “Lion-kai,” a series of meetings to boost communication with wholesalers. In these meetings, Lion provides an explanation of its management strategies and sales and marketing strategies, while at the same time clarifying roles and responsibilities through vigorous exchanges of opinion. In this way, Lion works in unison with wholesalers to improve customer satisfaction.



“Lion-kai”

For our partners in the logistics industry, Lion holds the Spring New Product Presentation during which the Company introduces its new health care and household products.

Conducting a variety of experiments, Lion researchers provide



easy-to-understand explanations of product features, while suggestions related to marketing methods and the creation of product display areas are offered by the Product Division.

Supported by a mutual understanding nurtured between wholesalers, retailers and Lion, store coordinators from Lion Field Marketing Co., Ltd. and Leo Field Promotions Co., Ltd. regularly visit about 7,000 retail outlets for home products and 3,600 for pharmaceutical products. The coordinators collect information concerning customer needs and distributor requirements. At the same time, they work to create fresh, attractive product display areas at retail outlets, ensuring a quality that satisfies customers.

#### Moving toward Product Development that Has the Highest Customer Satisfaction

Through its regular business activities, Lion undertakes exchanges of information with suppliers that deepen these trusting relationships. Along with this, Lion is making every effort to gain a precise understanding of the latest trends concerning raw materials.

In particular, given that the joint development, stable supply and quality assurance management of new materials and raw materials with new functions are very important for making products that satisfy customers, cooperative ties between the Company and suppliers are indispensable.

Lion has also established standards from the perspective of safety, environmental suitability and quality that are applied to its purchases of raw materials, building a relationship that provides customers with safe products of unquestionable quality.

#### Working Together with Competitors “Competing at the point of sales, while distributing in cooperation”

Together with a competing manufacturer, Lion established Planet Logistics Co., Ltd. in 1998, and conducts joint shipments to wholesalers. The idea behind joint shipments is “to compete at the point of sales, while distributing in cooperation.” Each manufacturer competes fairly at the store level, while leveraging the advantages of joint distribution. These advantages include: (1) a reduction in logistics costs; (2) enhanced logistics quality; and (3) more appropriate measures to address environmental issues.

Set schedules, set volumes, bulk shipping, systemization and standardization related to joint distribution are directly connected to operational improvement and efficiency for businesses that Lion delivers to (please refer to p. 23 for more details).

\*The Ten Principles of the Global Compact  
These principles were espoused by the Secretary-General of the United Nations, Kofi Annan, at the World Economic Forum held in January 1991, and they were formally inaugurated at the UN Headquarters in July 2000.  
For more details, please visit the following website: <http://www.unglobalcompact.org/AboutTheGC/TheTenPrinciples/index.html>

## Lion Is Undertaking a Wide Range of Social Contribution Activities, Reflecting the Unique Characteristics of Each of Its Businesses

Utilizing technology and human resources cultivated through its business activities, Lion is contributing to society primarily in the area of oral hygiene, as well as through the maintenance of forests and aquatic environments.

In addition, accompanying these efforts to carry out its business activities in harmony with the community, Lion respects the volunteer spirit of employees and supports their contribution to socially beneficial activities.



### Nature Conservation Activities

Given that Lion's business operations are characterized by a wide variety of products being used and discharged into the environment with water, the Company has been bolstering its social contribution activities in relation to aquatic environments and forest maintenance since 2006. Lion is also continuing to support efforts to protect such endangered species as the Odawara killifish and little terns.

#### Support for the Japan Water Award

In 2006, Lion commenced support activities for the Japan Water Award and the Japan Stockholm Junior Water Prize and is cooperating to invigorate activities that preserve aquatic environments. The Japan Water Award was established in 1998 for the purpose of supporting efforts to recover healthy water circulating systems. This award welcomed His Imperial Highness Prince Akishino as its honorary president in 2005, and he provides words of encouragement to award winners every year. At the same time, the Japan Stockholm Junior Water Prize was established in 2002 and commends outstanding research activities conducted by students under the age of 20. Prizewinners become candidates to represent Japan at the Stockholm Junior Water Prize (SJWP) held every summer in Sweden.



2007 Japan Water Award ceremony (June 1, 2007)

#### Forest Trimming Activities in "Lion Forest in Yamanashi"

Forests have various functions such as absorbing CO<sub>2</sub>, producing clean water and preventing floods. Within the 6% reduction in greenhouse gases target that Japan committed itself to in the Kyoto Protocol, 3.8% of this reduction is accounted for by absorption in forests. However, today's forests in Japan are not well maintained due to weak timber prices.

Given this situation, Lion set up "Lion Forest in Yamanashi" in 2006 for the purpose of promoting CO<sub>2</sub> absorption and invigorating "sustainable forest management" through the utilization of paper made from lumber from forest trimming and thinning activities. This activity became the first undertaking of the "Company Forest Promotion Project" conducted by Yamanashi Prefecture, and Lion supports the forest trimming of Yamanashi City's communal forest (approximately 65 hectares) and costs for transporting thinned wood to a wood chip plant. Through the 3.9 paper system, thinned wood is utilized for the paper in such documents as CSR reports, company brochures, product catalogs and annual reports, and this contributes to the promotion of thinned-wood use. In addition, Lion employees have been taking full advantage of the Volunteer Special Leave System in order to carry out voluntary forest maintenance activities since the establishment of "Lion Forest in Yamanashi," which includes participating in tree-planting activities for the first time in April 2008. Obtaining cooperation from nearby Yawata Elementary school, 26 fifth-grade elementary students participated in Lion's tree-planting activities on the second scheduled day of this program.

The Company will continue this activity with volunteer workers every year.



Employee volunteers engaged in forest preservation activities (April 11, 2008)

### Establishment of the “Japan Clean Water Foundation”

On April 1, 2008, Lion Corporation launched the “Japan Clean Water Foundation” in partnership with the Japan River Association (JRA) as a project to further the Company’s aquatic environmental protection activities. A portion of proceeds from the sale of TOP laundry detergent, from April 1, 2008 to June 30, 2008, will be donated to the “Japan Clean Water Foundation,” which provides monetary support for activities that protect rivers, lakes and waterfronts nationwide. In addition, Lion accepted submissions from children up to the sixth grade

of elementary school for the “Waterfront Painting Contest,” based on themes related to clean rivers, lakes and other bodies of water.



Waterfront Painting Contest poster



Japan Clean Water Foundation symbol

### Support for Academic and Educational Activities

#### The Lion Award

To support the activities of academic associations in the field of preventive dentistry and the development of young researchers, we instituted the Lion Award in 2001. Researchers are selected each year from the International Association for Dental Research (IADR), the Japanese Society of Pediatric Dentistry, the Japanese Association for Oral Biology, the Japanese Society for Dental Health and the Japanese Society of Periodontology, and they are researchers who are recognized for their innovative research and achievements. The awards are in the form of a plaque and cash prize. In the seven years since the awards were inaugurated in 2001, a total of 66 researchers have been recognized.

#### Support for Science Education

Edogawa-ku in Tokyo has a science education project to teach children about scientific phenomenon happening around us and its fascinating aspects. To that end, as a company that has research laboratories in Edogawa-ku, Lion participates in this project every year. In 2007, educational support activities were held on July 7 and 14, with 24 Lion researchers participating. Children watched closely as the power of detergent cleaned dirt from garments, and they let out a cheer after touching the frozen bubbles. Observing the scientific background of detergent at work, a process so common in daily life, the children seemed to become interested in science. Every year even more interesting ideas for experiments are being considered.



Educational support activity at the Edogawa-ku Science Education Center (July 14, 2007)

### Factory Tours for the Public

To better familiarize the public with Lion’s products and demonstrate the Company’s emphasis on safety and environmental protection, Lion held 309 factory tours during 2007, welcoming a total of 8,030 visitors.

#### ■ Details of factory tours in 2007

|                             | Chiba | Odawara | Osaka | Akashi | Total |
|-----------------------------|-------|---------|-------|--------|-------|
| Number of tours             | 95    | 114     | 34    | 66     | 309   |
| Number of tour participants | 1,977 | 3,142   | 1,016 | 1,895  | 8,030 |



Students from local schools visit to gather acorns. In addition to factory tours, a variety of different types of observation tours are provided (Odawara Plant, September 28, 2007)



Factory tour by neighborhood residents (Chiba Plant, November 17, 2007)

## Lion's Activities around Its Sites

As members of the local community, Lion is directing its energies into such activities as local beautification and cleanup, nature conservation, and education and development programs.

### Inviting children to the Sumida River Fireworks Festival

(July 28, 2007)

Lion has invited children from orphanages to the rooftop of its head office for the Sumida River Fireworks Festival in Tokyo every year since 1999. In 2007, 33 employees participated in volunteer activities, inviting 70 children.



### Summer extracurricular seminar for elementary school students

Hand washing and toothbrushing exercise

(August 26, 2007)

Since 2006, Lion has been implementing a summer extracurricular seminar once a year for fourth-, fifth- and sixth-grade students and their guardians living in Sumida-ku, Tokyo and attending local area elementary schools. The purpose is for students to have fun while learning proper hand washing and toothbrushing methods. In 2007 as well, this seminar took place under the instruction of Lion researchers and dental hygienists from the Lion Foundation for Dental Health.



## The Scientific Approach to Understanding the Relationship between Oral and Physical Health

### Research Activities of the Lion Foundation for Dental Health (LDH)

Lion established the Lion Foundation for Dental Health (LDH) in 1964 to foster research and promotion activities related to oral health. LDH has been engaged in improvement activities for oral health tailored to each life stage by conducting dental health training programs for parents and children at kindergartens, schools, industrial centers, retirement centers and communities, in addition to conducting oral health examinations, research and information dissemination.

Regarding the important role our mouths play in daily living, through activities such as eating, talking and laughing, the current aim of LDH is to increase people's awareness of proper oral care, and to develop the concept of "a beautiful, healthy mouth makes for a vigorous mind and body!"

Keeping current with the times, LDH regularly engages in oral care promotion, educational activities and examinations.

#### Achievements in 2007

- |   |   |   |   |
|---|---|---|---|
| 1 |  <p><b>Dental Health Activities for Parents and Children</b></p> <p>Events held: 32 times<br/>Patients seen: 1,215 children and 791 parents</p>  | 2 |  <p><b>Visiting Schools and Kindergartens for Training Programs</b></p> <p>Number of schools and kindergartens that had programs: 628, 764 times<br/>Number of participants: 65,300</p> |
| 3 |  <p><b>Mass Tooth Brushing Exercise for School Children</b></p> <p>Number of participating elementary school students: 1,150<br/>Number of participating dental hygienist school students: 1,750</p> | 4 |  <p><b>Industrial Dental Health Activities</b></p> <p>Number of businesses visited: 226, 422 times<br/>Number of patients: 27,511</p>   |
| 5 |  <p><b>Dental Health Activities for the Elderly</b></p> <p>Events held: 31 times<br/>Number of patients: 882</p>   | 6 |  <p><b>Dental Care Activities</b></p> <p>Number of patients: 12,212</p>   |

## Community Service Activities at Overseas Affiliates

Lion's overseas affiliates also engage in a variety of community service activities based in each region where they operate.

### Lion Corporation (Thailand) Ltd.

Through the cooperation of four organizations, of which Lion Corporation (Thailand) Ltd. is included, financial support is being provided to the "Beloved Child starts from the first teeth" Project, a project dedicated to teaching children about dental care. In addition, Lion Corporation (Thailand) Ltd. made donations to protect buffalo and other endangered species.

"Beloved Child starts from the first teeth" Project



### Southern Lion Sdn. Bhd. (Malaysia)

At Southern Lion, the Lion Dental Hygiene Center (LDHC) is continuing to convey to children how important teeth are as well as proper brushing methods, and it carries out visits to kindergartens, elementary schools and shopping malls. Moreover, this affiliated company is providing a wide variety oral care and other necessary products to victims of the flood that occurred in Johor Bahru—located at the southern tip of the Malay Peninsula—through The Red Crescent Society.

Educational programs conducted at elementary schools by the LDHC



# Aiming to Become a Leading Company in Environmental Friendliness

As a company that provides products used in consumers' everyday lives, Lion considers environmental activities as its fundamental management issue. Aiming to become a leading company in environmental friendliness, Lion is promoting "ECO LION" activities, which are environmental protection activities carried out companywide.



## ENVIRONMENTAL GUIDELINES

Lion is to act voluntarily and proactively to reduce the environmental burden of its corporate activities—from research and development to raw materials procurement, manufacturing, logistics, sales and marketing, household use, and disposal—on the global environment, with due consideration to global warming prevention, effective use and recycling of natural resources and contribution to the improvement of people's health and the natural ecosystem.

### (1) Aiming for a Sustainable Society

Establish an environmental management system, and through ongoing maintenance and improvement of that system, protect the global environment.

### (2) Complying with Legal and Other Requirements

Comply with the system of legislation, regulations and arrangements pertaining to environmental protection and establish and implement voluntary standards of conduct.

### (3) Setting and Verifying Implementation of Environmental Objectives and Targets

Correctly understand the environmental impact of corporate activity, and as far as technically and economically possible, establish objectives and targets for improvement, while at the same time formulating, implementing and regularly verifying the status of implementation of an environmental management program.

### (4) Developing Environment-Friendly Products

Continue aggressively with product development in accordance with Lion's own "Three Principles of Environmentally Responsible Composition Development" and the "3Rs of Container and Packaging Reduction."

### (5) Advancing Green Supply Chain Management

Construct a green supply chain with raw material suppliers, OEM partners and retail outlets and strive for environmental burden reduction throughout entire product lifecycles, from procurement to sale to customers.

### (6) Enhancing Environmental Protection Activities Based on Uniform Understanding of the Guidelines within the Lion Group

Disseminate the Guidelines to all Lion employees, including those of its affiliated companies, raise an awareness of environmental protection among them and bolster environmental management activities throughout the entire Lion Group.

### (7) Promoting Disclosure of Information

Seek to maintain and promote communication with stakeholders involved in Lion's businesses. These Environmental Guidelines are freely available to anyone upon request.

Revised April 3, 2006

## Environmental Management System

Using the Environmental Guidelines as its reference point, in order to build a cooperative structure for all employees to tackle environmental issues within the promotion of "ECO LION" activities, Lion maintains an environmental management structure and operates an environmental management system. These measures help to improve environmental protection activities.

### Environmental Guidelines

Lion has formulated its Environmental Guidelines in conformity to the spirit that underlies the Lion-Group Charter for Corporate Behavior (see <http://www.lion.co.jp/en/company/html/com0201f.htm>), which states: "We shall play a positive and active role in creating a 'Sustainable Society,' harmonizing economic development and environmental protection."

In April 2006, Lion revised its Environmental Guidelines (see above) to include aggressive development of environmentally friendly products as well as reduction of environmental burdens in the entire supply chain.

### Environmental Management Structure

As part of efforts to build a cooperative structure within the Lion Group for tackling environmental issues, Lion has established the Environmental Action Promotion Committee, which involves the production division, administrative and marketing divisions, research & development division and headquarters staff divisions.

Constantly examining the status of its business activities from an environmental protection perspective, we are endeavoring to secure legal compliance and set up and clear voluntary standards and targets for the entire Lion Group, as well as to grasp precisely the current condition of implementation progress.

### Utilizing the Environmental Management System

The environmental management system allows us to measure, evaluate, and reduce the environmental impact of our business activities, products, and services. Lion also aims to establish a good environmental record through continuous improvement. With the Environmental Guidelines as its reference point, the Company strives for continuous improvement using the Plan, Do, Check, Action (PDCA) concept.

### Status of ISO 14001\* Certifications

Lion received en bloc ISO 14001 certification of all its factories in July 2001. In May of 2004 and 2007 respectively, the Japan Management Association Quality Assurance Registration Center (JMAQA) conducted renewal examinations, and Lion currently maintains this certification.

\* ISO 14001: An international standard for certification of a company's voluntary environmental management system. Awarded following inspection by independent third parties, this certification demonstrates that a company's environmental management level is up to international standards

# Lion's Environmental Maintenance Goals and Achievements in 2007 and Establishment of CO<sub>2</sub> Emission Reduction Targets for 2020

Lion has attained its goals in each area for the initial year of the Lion Group's Three-Year Medium-Term Environmental Plan, which began in 2007.

In addition, Lion has set targets for reducing CO<sub>2</sub> emissions by 2020 as a post-Kyoto Protocol goal and is currently implementing this plan.

In coordination with the VIP II 09 medium-term management plan, Lion established the Three-Year Medium-Term Environmental Plan for the entire Lion Group in 2007 with a new orientation based on social trends relating to global environmental issues as well as the Company's achievements to this point.

In 2007, various measures were initiated for each aspect of this three-year plan during the first year, and achievements are steadily being made. Hereafter, Lion will address such issues as promoting the attainment of zero emissions for affiliated companies and the utilization of plant-based ingredients.

## Environmental Goals for 2007 to 2009 and Achievements in 2007

◎ : Attained ○ : Almost attained × : Unattained

| Item  | Goal   |  |  | Results   |  | Related page |
|---|--|--|--|---|--|--------------|
|   | 2007   | 2008                                   | 2009   | Achievement (Results for 2007)                                      | Principal measures (Results for 2007)  |              |
| CO <sub>2</sub> emissions reduction         | Reduce CO <sub>2</sub> emissions to 93% or less compared to the 1990 level (Over 7% reduction)                   | Under 86% (Over 14% reduction)         | Under 90% (Over 10% reduction)   | ◎ (86% compared to the 1990 level)                                  | Switching to liquefied natural gas (LNG) fuel, and installation and upgrading of energy conservation devices   | P. 22        |
|   | Energy use per unit of specific productivity in the Logistics Division to 99% or less compared to the 2006 level | 99% or less compared to the 2007 level | 99% or less compared to the 2008 level   | ◎ (97% compared to the 2006 level)                                  | Promotion of modal shift<br>Promotion of shifting to larger-sized vehicles   | P. 23        |
| Chemical substance management               | Volatile organic compound (VOC) emissions to 67% or less compared to the 2000 level                              | Under 60%                              | Under 60%  | ◎ (54% compared to the 2000 level)                                  | Introduction of VOC recovery equipment and improved product composition to reduce VOC emissions  | P. 29        |
| Waste control                               | Reduce total waste generation to 64% or less compared to the 1990 level  | Under 56%                              | Under 60%  | ◎ (58% compared to the 1990 level)                                  | Promoting the maximization of resource usage and the reuse and recycling of cleaning water used in production processes  | P. 24        |
|   | Reduce final waste landfill volume to 13% or less compared to the 1990 level                                     | Under 11%                              | Under 10%  | ◎ (13% compared to the 1990 level)                                  | Promotion of recycling programs  | P. 24        |
| Environmental care through company products |  |  | Over 150,000-ton reduction from the 1990 level of product-oriented CO <sub>2</sub> emissions   | <No 2007 target> (100,000-ton reduction compared to the 1990 level) | The increased amount of fossil materials used as a result of a rise in sales in one product segment prevented any progress in promoting the use of plant-based ingredients | P. 22        |
|   |  |  | The amount of plastic containers and packaging materials used per unit of specific productivity in eight home product segments fell 70% compared with the 1995 level | <No 2007 target> (70% compared to the 1995 level)                   | Owing to designs that are innovative and compact, the amount of containers and packaging materials used is reduced and the use of refill products is expanded              | P. 27-28     |

## Establishing post-Kyoto Protocol goals, by 2020 Lion aims to achieve:

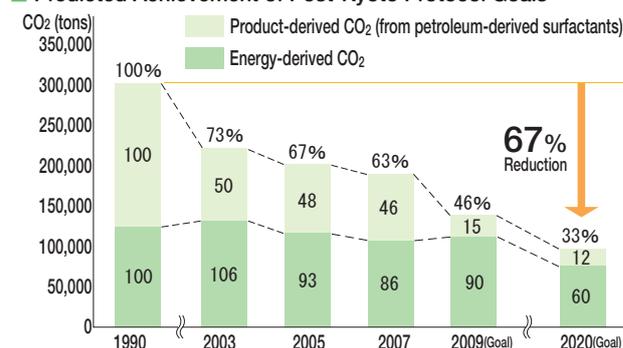
In 2020

Reductions in the amount of CO<sub>2</sub> emissions derived from energy use to 40%  
Reductions in the amount of CO<sub>2</sub> emissions derived from products to 88%

Total reductions of CO<sub>2</sub> emissions by 67% of 1990 levels

Recently, debates have intensified worldwide as we face the post-Kyoto Protocol era from 2013 onward. For example, in May 2007, the Japanese government proposed reducing world greenhouse gas emissions by half of current levels by 2050. In this context, the Lion Group has renewed its post-Kyoto Protocol CO<sub>2</sub> emission reduction targets (absolute amount). Exceeding the lofty targets proposed by Japan government, Lion is striving to steadily achieve these goals, while integrating them into future business plans.

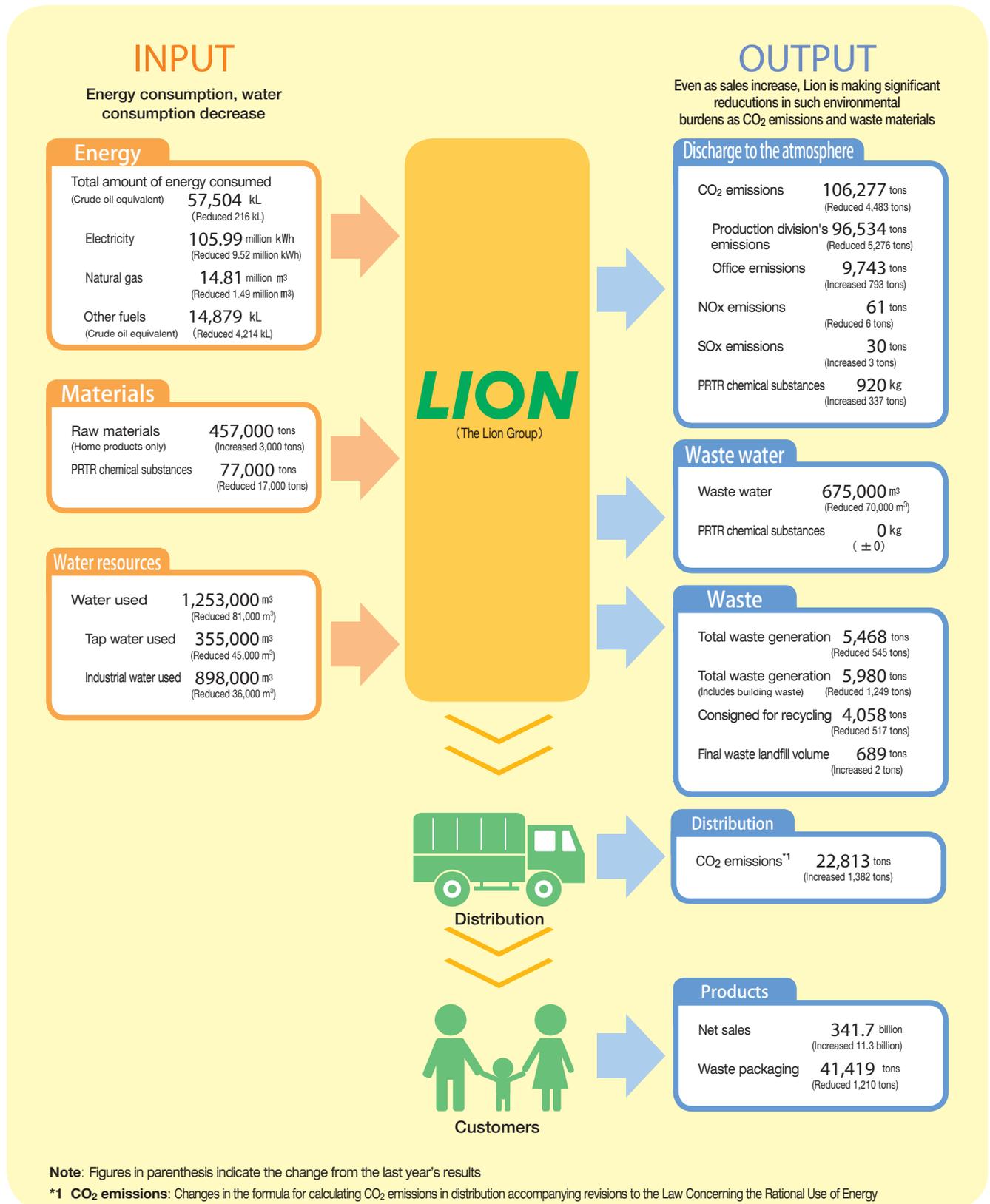
### Predicted Achievement of Post-Kyoto Protocol Goals



# A Complete Picture of Environmental Burdens Related to Business Activities

Lion is striving to reduce environmental burden in the entire product life cycle, from raw materials procurement through to product disposal.

In 2007, significant reductions were achieved in CO<sub>2</sub> emissions and total waste generation.



# Environmental Accounting

Environmental accounting is an important indicator to promote efficient and sustainable environmental protection activities.

Lion will continue to improve its environmental activities by grasping the entire picture through the utilization of environmental accounting.

## Environmental Accounting

### Lion Group's Environmental Accounting

Each year, aggregate calculations related to economic effects (real effects) accompanying environmental protection costs, environmental protection effects and environmental protection measures throughout the Lion Group are undertaken, based on Ministry of the Environment guidelines.

Environmental protection costs refer to investments and costs for such activities as prevention, suppression, avoidance and recovery of damages stemming from environmental burdens related to business activities.

Placing a high priority on environmentally friendly products, Lion Corporation has established, on an independent basis, environmentally friendly product items, to which business-area expenses from environmental protection costs have been applied. Environmental

protection costs for environmentally friendly products are calculated based on the method of classifying them into coefficients in accordance with Lion Eco Standards, then using these as each product's environment-friendly coefficient to multiply by investment and cost of facilities. For a manufacturing facility that produces several kinds of products, however, the manufacturing volume composition at the facility is taken into account in the calculation, and the weighted-distribution method is applied.

Lion Corporation's environmental accounting calculation period follows the Company's financial year, from January 2007 to December 2007.

#### ■ Economic effects associated with environmental protection measures

| Effects   | Year-on-Year Reduction (Millions of yen) |
|---|--|
| Decline in cost due to energy conservation            | —  |
| Decline in cost due to natural resources conservation | 244                                      |
| Reduced amount of water and sewerage bills            | 41                                       |
| Reduced amount of waste disposal*                     | 10                                       |

\* The figure includes sales of valuable resources

#### ■ Environmental accounting for 2007

( ): Reduction

| Environmental protection costs (millions of yen) |   |            |       | Environmental protection efficiency  |  |   | Related information |
|--|---|------------|-------|--|--|---|---------------------|
| Category   | Principal activities  | Investment | Cost  | Item   | 2007                                     | effects                                     |                     |
| Business area costs                              | Pollution prevention<br>Air pollution prevention,<br>Water pollution prevention, etc.                                       | 24         | 344   | NOx emissions (tons)<br>SOx emissions (tons)<br>Particulate emissions (tons)<br>Total COD (tons)   | 61<br>30<br>14<br>17                     | (6)<br>3<br>2<br>(6)                        | P. 24<br>P. 29      |
|  | Environmental protection<br>Energy conservation, etc.   | 118        | 3,990 | Energy consumption (tons of CO <sub>2</sub> )<br>Industrial water used (m <sup>3</sup> )<br>Tap water used (m <sup>3</sup> )<br>Wastewater emissions (m <sup>3</sup> ) | 106,277<br>898,196<br>355,230<br>674,714 | (4,483)<br>(36,146)<br>(44,461)<br>(69,991) | P. 22-24            |
|  | Resource recycling<br>Waste disposal, recycling, etc.   | 0          | 281   | Total waste generated (tons)<br>Total waste volume for final landfill (tons)<br>Recycling rate (%) (Volume of recycling/<br>Volume of waste consignment)               | 5,980<br>689<br>77                       | (33)<br>2<br>(10)                           | P. 24               |
|  | Environment-friendly products<br>Environment-friendly product manufacturing facilities, etc.                                | 3,741      | 2,629 | Use of biodegradable materials, plant-based materials, compact products, refillable products, recycled paper, reprocessed PET bottles, etc.                            |  |   | P. 25-28            |
| Upstream/<br>downstream costs                    | Commissioning costs incurred in connection with the Containers and Packaging Recycling Law and product waste disposal, etc. | —          | 724   | Packaging materials used<br>Product waste (tons)   | 70,212<br>5,905                          | (221)<br>1,652                              | P. 27-28            |
| Managerial activity costs                        | ISO 14001 renewal expenses, environmental education, publication of reports, exhibitions, others                            | 1          | 610   |  |  |   | P. 17<br>P. 31      |
| Research and development costs                   | Environment-friendly product development expenses, etc.   | 98         | 1,389 |  |  |   | P. 25-28            |
| Community service costs                          | Regional environmental activities, donations, others  | 0          | 9     |  |  |   |                     |
| Environmental damage costs                       | Costs for soil improvement, etc.  | 0          | 0     |  |  |   | P. 29               |
| Total  |   | 3,982      | 9,976 |  |  |   |                     |

# ECO LION ACTIVITIES (Lion's environmental protection activities)

Lion commenced "ECO LION" activities under five principal initiatives with the aim to become a "leading company in environmental friendliness."

In 2007, Lion established the Three-Year Medium-Term Environmental Plan and is moving towards achieving the goals of each of these initiatives.

In 2006, Lion formulated the ECO LION Declaration to promote ECO LION activities. These activities encompass all of Lion Corporation's business activities, from research and development, raw materials procurement, manufacturing at plants, marketing, logistics, and sales to household use and disposal.

In 2007, of the five principal initiatives, Lion was presented with the 16th Grand Prize for the Global Environment Award\*1 in recognition in particular for "reducing greenhouse gas emissions" and "considering the environment from a product-oriented perspective."

ライオンは環境に  
前向きに取り組んでいます。



## ECO LION Activities' Five Initiatives

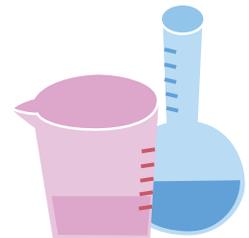
### 1 Reducing greenhouse gas emissions

Lion is undertaking activities to reduce total CO<sub>2</sub> emissions, including those from its business activities, as well as CO<sub>2</sub> emissions attributed to the use of its products by consumers.



### 4 Appropriately handling chemical substances

Thoroughly complying with various relevant regulations regarding safety assurance and environmental consciousness, Lion pays close attention to safety and the environment at every stage of product life, striving for thorough control of chemical substances and reduction of their use.



### 2 Effectively using and recycling resources

Lion strives to reduce total waste generation and final waste landfill volume while establishing a waste recycling control system.



### 5 Fostering environmental awareness within the Lion Group

Aiming to become a "leading company in environmental friendliness," Lion is implementing environmental education on a continual basis to raise each employee's awareness of environmental issues.



### 3 Considering the environment from a product-oriented perspective

Through the utilization of "Lion Eco Standards," which were established in 2006, Lion is promoting the development of eco products from a clear environmental perspective.



The award ceremony of the 16th Grand Prize for the Global Environment Award

\* 1 The Grand Prize for the Global Environment Award, which aims for "symbiosis between industrial development and the global environment," was established in 1992 in special cooperation with the World Wide Fund for Nature Japan (WWF Japan, Honorary President: His Imperial Highness, Prince Akishino). These represent Japan's most authoritative and prestigious awards for environmental achievements

# 1 Reducing greenhouse gas emissions

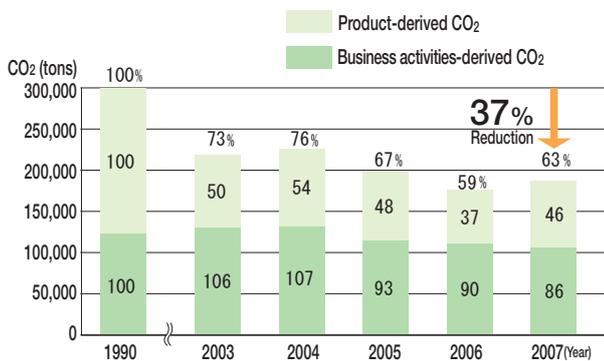
Eyeing the post-Kyoto Protocol framework, Lion is reducing CO<sub>2</sub> emissions from its business activities as well as those attributed to the use of its products by consumers in order to prevent global warming.

In 2005, the Kyoto Protocol came into effect and called for the reduction of greenhouse gas emissions between 2008 and 2012 by 6% for Japan compared with 1990 levels. In the backdrop of this, Lion Corporation is eyeing the post-Kyoto Protocol framework, as all employees actively make efforts to reduce CO<sub>2</sub> emissions.

## Initiatives to Reduce CO<sub>2</sub> Emissions

With the establishment of the Three-Year Medium-Term Environmental Plan, Lion has pioneered the reduction of CO<sub>2</sub> emissions, combining those from its business activities and those attributed to the use of its products by consumers. In 2007, the Lion Group succeeded in reducing the total amount of CO<sub>2</sub> emissions by 37% from the 1990 level.

■ Trends in total CO<sub>2</sub> emissions from the Lion Group's business activities and the use of its products



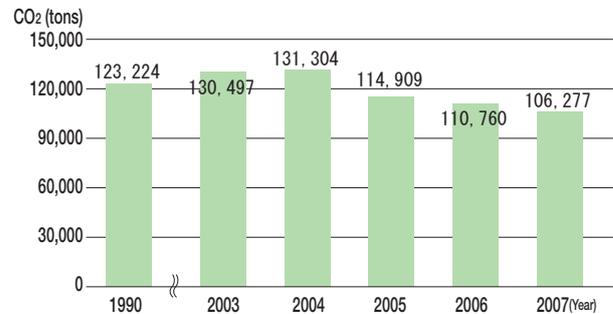
## Business Activities: Achieving the Goal of Reducing CO<sub>2</sub> Emissions

In 2007, as part of its activities to reduce CO<sub>2</sub> emissions, the Production Division implemented energy conservation measures including switching from heavy fuel oil as the fuel used in the manufacturing process (drying) for powder laundry detergent to natural gas, which emits less CO<sub>2</sub>. Among the activities undertaken to reduce CO<sub>2</sub> emissions, Lion Corporation participated in Japan's Team Minus 6% project at its offices and R&D division, thoroughly promoting "eco-drive" through the use of eco-friendly commercial vehicles, the introduction of low-emissions vehicles (LEV), and car-sharing initiatives.

As a result, CO<sub>2</sub> emissions in 2007 were reduced 14% compared with the 1990 level, a 4% reduction from the previous year, making it possible for Lion to achieve

emission targets that are 93% or below (7% or greater reduction) the 1990 level formulated in the Three-Year Medium-Term Environmental Plan.

■ Trends of business activities-derived CO<sub>2</sub> (The Lion Group)



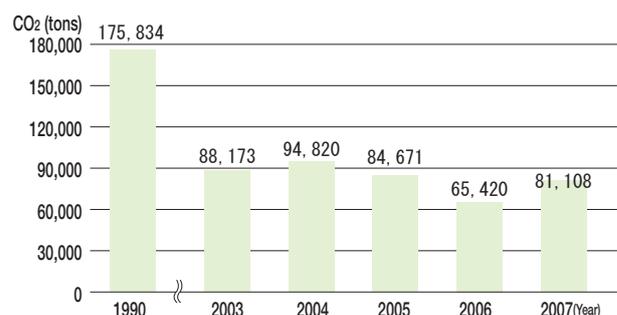
## Product Use: Reducing CO<sub>2</sub> Emissions by 54% Compared with the 1990 Level

Lion Corporation is promoting product research and development with the aim of reducing CO<sub>2</sub> emissions from products after household use. Specifically, this involves furthering the switch from surfactants made from petroleum-based ingredients to plant-based surfactants that do not lead to the increase of CO<sub>2</sub> ("carbon neutral-effect," please refer to page 3), as efforts to reduce CO<sub>2</sub> emissions from products.

In 2007, as a result of an increase in the manufacturing volume of dishwashing detergents blended with petroleum-based surfactants, CO<sub>2</sub> emissions from all of our products rose 24% compared with the previous year, but this was a 54% reduction from the 1990 level. Hereafter, Lion is striving to reach its target for 2009 of a 150,000-ton reduction compared with the 1990 level.

By actively making efforts to use plant-based ingredients in the years ahead, Lion is working towards reducing CO<sub>2</sub> emissions both from products and business activities.

■ Trends of product-derived CO<sub>2</sub> (The Lion Group)



## Environmental Activities at Lion Offices

All employees are promoting ECO LION activities with the aim of making Lion a “leading company in environmental friendliness.” As part of these activities, Lion participated in the Team Minus 6% project in July 2005, a government-promoted national movement to prevent global warming.

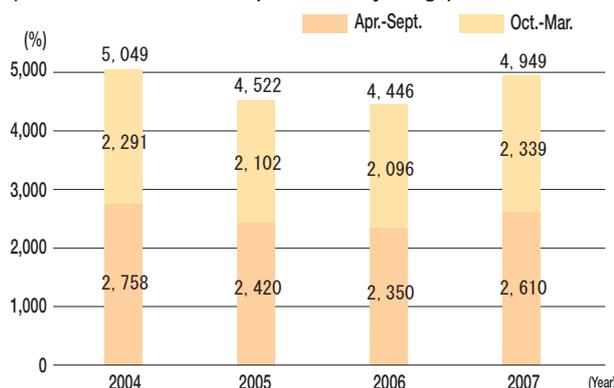
To that end, Lion commenced implementation of the following four measures:

1. Appropriate temperature settings for air conditioning (summer: 28°C; winter: 20°C)
2. Adopting a system to allow all the employees to leave on time once a week to reduce electricity usage
3. Practicing thorough energy-saving measures by switching off unnecessary lighting during lunchtime in unattended bathrooms and other areas
4. Promoting eco-driving with its company vehicles

In addition, Lion completed the “Lion Eco Green Garden” on the top of its head office building (approximately 50m above the ground and 240m<sup>2</sup>) in 2006 in accordance with the “green roof policy” in Sumida-ku, Tokyo. Measuring the surface temperature of the building, it was confirmed that these green modifications had curbed overheating of the building from 56.1°C to 39.7°C in August 2007. Reduction of energy use from air conditioners is expected from the green roof’s curbing of the “heat-island phenomenon.”

Due to these activities, a 100-ton reduction in CO<sub>2</sub> emissions compared with 2004 at the Lion Group offices was achieved between April 2007 and March 2008. Furthermore, accompanying factory closures in the Tokyo area, CO<sub>2</sub> emissions from onsite employee welfare facilities (employee lockers, cafeterias and sports gyms and other facilities), which had been included within the Production Division until now, have been included in Lion’s offices (Hirai Research Institute) from 2007 onward. Excluding this transferred section (459 tons of CO<sub>2</sub>), Lion achieved a 559-ton reduction of CO<sub>2</sub> compared with the 2004 level.

■ The Lion Group’s total CO<sub>2</sub> emissions at its offices (calculated from the Group’s electricity usage)



## Global Warming Countermeasures in Logistics

In cooperation with affiliated companies that handle logistics within the Lion Group, we have long pursued the enhancement of logistics efficiency. In 2007, direct shipments from factories expanded, and this has decreased the total shipping distance.

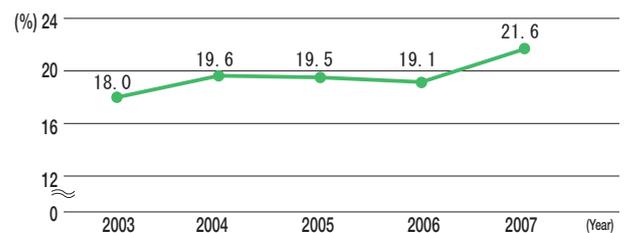
Through this and measures to improve shipment load ratios such as larger shipment lot sizes, integration of logistics bases and joint logistics with other manufactures, Lion is working to reduce the amount of fuel being used for this purpose.

Furthermore, Lion is vigorously undertaking such measures as using larger trucks for product transport and continuing its modal shift in its logistics system by switching to railways and ships. The Company acquired the “Eco Rail Mark,” which is certified by the Ministry of Land, Infrastructure and Transport, in 2005.



As a result, energy consumption per unit of specific productivity between April 2007 and March 2008 fell 97% year-on-year, achieving the 99%-or-below target compared with the previous year. In addition, Lion’s modal shift rate for 2007 improved to 21.6%. As a result of the impact of increased shipments (109% compared with the previous year), CO<sub>2</sub> emissions amounted to 106% compared with the previous year.

■ Modal shift rate



## 2 Effectively Using and Recycling Resources

In accordance with the philosophy of the Basic Law for Establishing the Recycling-based Society, Lion is facilitating waste reduction and recycling, bringing significant results.

Lion has achieved substantial reductions in both total waste generation and final waste landfill volume compared with the 1990 level.

### Zero Emissions are Being Expanded Within the Lion Group

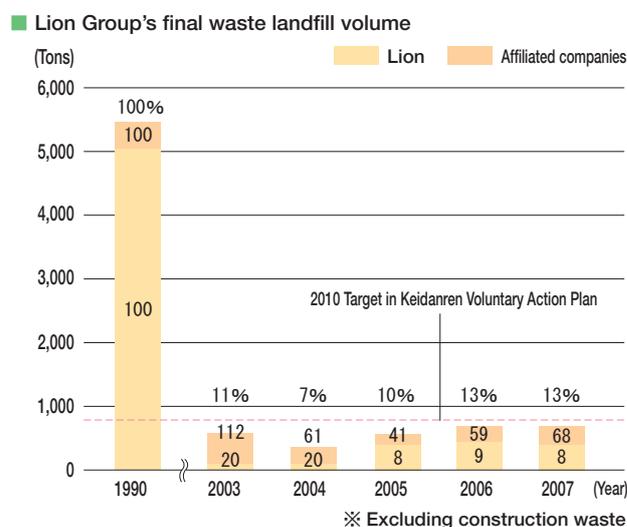
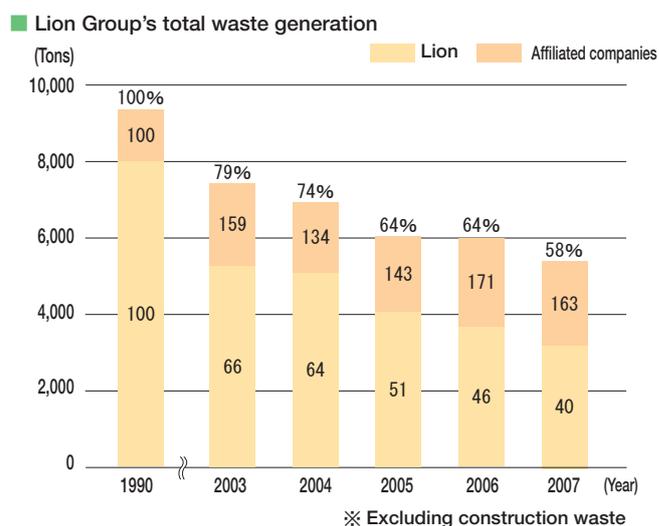
In 2007, the Production Division implemented measures on an ongoing basis to increase the volume of reusing cleaning water and waste solvents, maximize waste plastic and metal usage, and reduce packaging materials loss through the stabilization of manufacturing processes. The Research and Development Division steadily undertook waste-sorting activities based on environmental inspections and guidance. Consequently, total waste generation stood at 58% compared with the 1990 level, achieving the 64%-or-below target for 2007. In 2008, Lion is aiming to attain a reduction to 56% or below compared with the 1990 level. In addition, owing to waste from its pilot plant, Lion's final waste landfill volume\*<sup>1</sup> has slightly increased since 2005. However, the Company has already attained the 13% of the 1990-level target (less than the target of 14%-or-below set by Nippon Keidanren from the 1990 level for 2010). Aiming for a reduction to 10% or below of the 1990 level in 2009, Lion is bolstering its reduction activities. Lion achieved zero emissions\*<sup>2</sup> in 2002 at its production facilities and has remained at that level since then. Hereafter, the entire Lion Group, including affiliated companies, is striving to achieve zero emissions. Furthermore, regarding waste disposal, supervisors responsible for overseeing waste generation at each division select and commission waste disposal contractors, in accordance with the standards to select the primary trustees outsourced following waste management regulations. Lion also implements regular on-site inspections of waste disposal contractor operations and verifies that contractors are complying with these regulations.

### Water Resources Preservation

While continuing its efforts to control water consumption and wastewater discharge, Lion strives to reduce volume and burdens to the water environment. In particular, Lion engages in the conservation of water resources through the maintenance and stabilization of wastewater-processing facilities on a regular basis. In 2007, the Company cut water consumption, wastewater discharge and COD\*<sup>3</sup> compared with the previous year due to such measures as efficient water-cleaning operations at its production facilities.

### Green Purchases

Expansions are being planned to the green purchase list related to office supplies used by Lion employees, and this is being promoted companywide. In 2007, the ratio of green purchases of office supplies amounted to 89%. However, due to the revelation in early 2008 that the blending ratio of recycled paper in the paper manufacturing industry had been camouflaged, ratio verification and revision of this list will be undertaken hereafter based on the results of deliberations undertaken by the Japanese government and other bodies.



\*1 Final waste landfill volume: The final volume of waste discharged for landfill, which does not include the residue from reuse as a resource

\*2 Lion's definition of zero emissions: A 99% or better proportion of total waste products emitted that are reused as resources; this does not include the residue from such reuse

\*3 COD: Chemical oxygen demand. An index of water pollution that indicates the amount of oxygen consumed in order to oxidize and break down organic substances in water

### 3 Considering the Environment from a Product-Oriented Perspective

In December 2006, Lion established “Lion Eco Standards” as its new environmentally friendly criteria, by which it currently operates. Fully utilizing these standards, Lion is promoting the development of eco products from a Life Cycle Assessment (LCA) perspective.

#### Product Development Activities that Consider the Environment

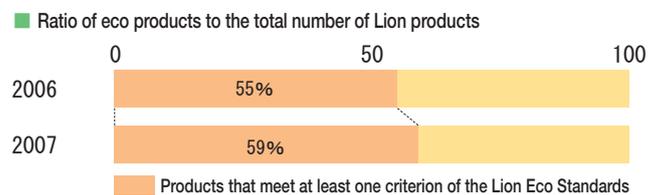
Lion promotes product development that takes the environment into consideration from the aspect of product composition (contents), as well as containers and packaging.

From 2007, Lion has undertaken the development of Eco Products utilizing the “Lion Eco Standards,” which is based on the perspective of LCA, including composition (contents) and containers and packaging.

Specifically, products are evaluated quantitatively in accordance with certain environmentally friendly points at the development stage, and if the result of this evaluation meets at least one criterion of the “Lion

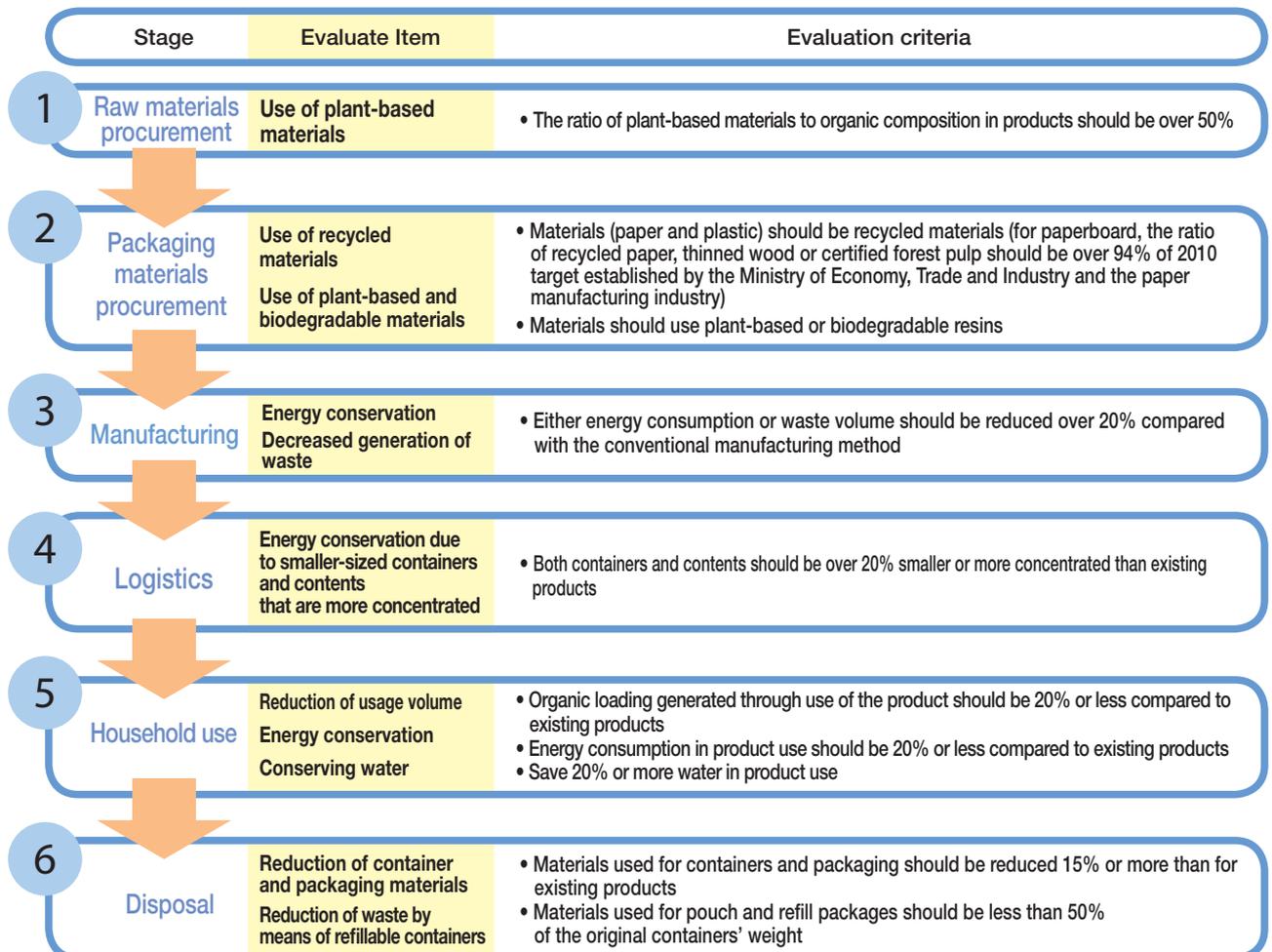
Eco Standards,” these products are designated as Eco Products.

In order to realize a sustainable, recycling-oriented society, it is necessary to recognize the value of petroleum and other limited resources, requiring that reductions be made in the environmental burden generated by products at each life cycle stage. In this context, Lion will continue to proactively develop eco products that take the environment into consideration.



#### Evaluation Items and Criteria in the Lion Eco Standards

Evaluation items and criteria in the Lion Eco standards are stipulated as follows:



\*Lion did not include criteria concerning free of harmful chemical content and excellent biodegradable properties in the Lion Eco Standards' evaluation items as they are an absolute necessity for the Company's products

## Development of Environmentally Responsible Composition

Stages (1) raw materials procurement, and (5) household use of the Lion Eco Standards are applied as items to evaluate product composition (contents) development. The evaluation standard for (1) raw materials procurement is based on the use of plant-based ingredients and for (5) household use, reduction of environmental burdens from the discharge of organic matter is applied. In addition, because Lion products are discharged into the environment after household use, “improved biodegradability” is a prerequisite.

Development of product composition that considers the environment is contributing to the protection of the aquatic environment and the prevention of global warming.

Product Composition Development Activity 1  
Lion Eco Standards' Evaluation Item 1

### Use of biodegradable surfactants

Organic matter within surfactants used in detergents and other products, which is released in the environment after use, biodegrades into CO<sub>2</sub> and water. Even though plant-based surfactants emit CO<sub>2</sub> as they biodegrade, because plants grow by absorbing CO<sub>2</sub> and solar energy, there is no increase in the total volume of CO<sub>2</sub> emitted into the atmosphere (carbon neutral). Plants are also reproducible resources.

Under the Lion Eco Standards, products in which organic matter is composed of plant-based ingredients at a level that is 50% or above will be designated as Eco Products.

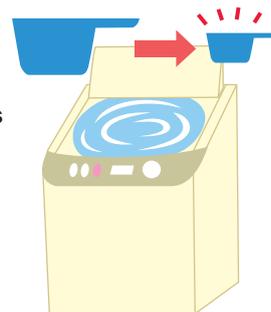


\*1 Biodegradation: the decomposition by microorganisms of organic matter emitted into the environment into carbon dioxide, water, and inorganic substances, or the ingestion of the matter by a living organism

Product Composition Development Activity 2  
Lion Eco Standards' Evaluation Item 5

### Reducing the amount of organic matter per load

When excess amounts of organic matter are discharged in the aquatic environment, such organic matter takes time to biodegrade due to superfluous environmental burdens.



Through the use of a high-efficiency composition (contents) that requires less per use, the amount of discharged organic matter can be reduced, thus decreasing the environmental burden on the aquatic environment. Based on the Lion Eco Standards, those products that reduce the discharge of organic matter by 20% or more compared with conventional products will be designated as Eco Products.

Product Composition Development Activity 3

### Use of biodegradable surfactants

Surfactants used in Lion products biodegrade quickly after use and do not remain in the environment for a long time.



\*Regarding Lion's development of the plant-based surfactant methyl ester sulfonate (MES), please refer to Special Topic Section 1 (p. 3-4)

**The “3Rs” of Containers and Packaging Reduction**

Lion is actively promoting the “3Rs” (Reduce, Reuse, Recycle) as an initiative to reduce containers and packaging materials. In addition, to achieve the Japan Soap and Detergent Association’s (JSDA) 2010 target of reducing packaging materials to 70% or more (compared with the 1995 level) in 2009, in accordance with its voluntary action plan, Lion is undertaking a wide range of efforts to reduce containers and packaging materials.

Stages (2) packaging material procurement, (4) logistics and (6) disposal, of the Lion Eco Standards, are applied as items to evaluate the reduction of containers and packaging materials. The evaluation standard for (2) packaging material procurement is based on the use of recycled materials; for (4) logistics, it is the compactness and concentration of products; and for (6) disposal, it is the reduction of containers and packaging materials, and the reduction of packaging material by the use of refillable containers.

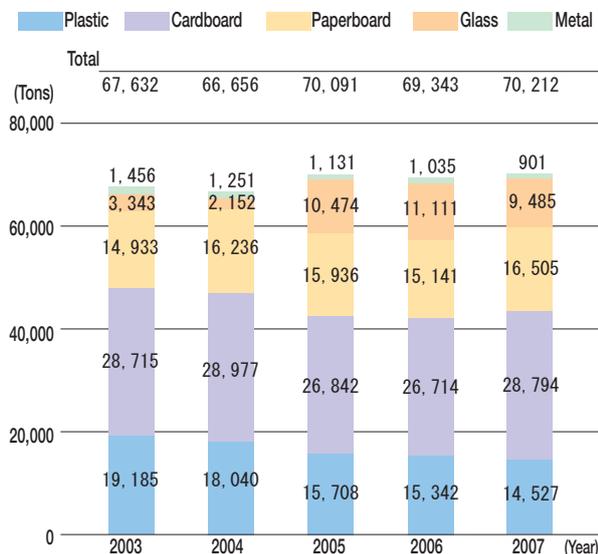
Activities to Reduce Containers and Packaging 1  
 Lion Eco Standards’ Evaluation Item 4 6

**Reduce: Reducing usage volume**

**Making Products Compact and Improving Container Design**

In order to reduce containers and packaging materials, by promoting high-efficiency laundry and dishwashing detergents, fabric softeners and other products, Lion is promoting concentrated products and more compact containers.

**The amount of containers and packing material used**



In 2007, the amount of containers and packaging materials used stood at 70,212 tons. Despite reductions in the amount of plastic, glass and metal, the total amount increased by 870 tons compared with 2006 stemming from increases in cardboard and paperboard use.

In addition, with the volume of plastic used standing at 70% of the 1995 level, Lion has attained the target of 70% or less (compared with the 1995 level)—established by the JSDA—for plastic use per unit of specific productivity in eight categories of home products.

Through increased product compactness and innovative container design in the future, Lion is striving to reduce the amount of containers and packaging materials used.

**Specifically designed containers**



## Reuse: Reusing Containers and Packaging

### Increasing the Number of Refill Products

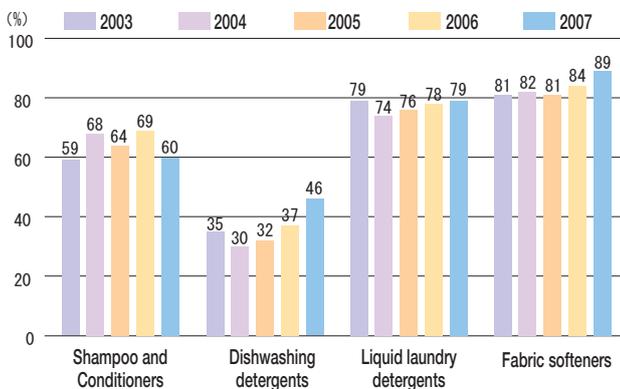
Plastic bottles for dishwashing detergent, shampoo and other products can be refilled and used over and over again. In addition, refill products require fewer materials to manufacture containers, thus contributing to the reduction of household trash.

Lion has been working to increase its number of refill products since 1992. Refill products for a wide array of products are available, including shampoo and fabric softener. Refill products are also available in the case of spray-type containers. Lion is also devising container shapes and other innovations for refill products that are easier for customers to use. Through the further expansion of refill products in the future, Lion is striving to develop containers that increase the ease of use for customers.

#### Innovative refill products and waste reduction effect



#### Trends in the refill product sales ratio for Lion's mainstay product categories



## Recycle: Conserving Resources

### Promoting the Use of Recycled Materials

#### Utilizing Recycled Plastic

Along with container manufacturers, Lion jointly developed a technology to use reprocessed PET resin. In 1989, Lion launched Mama Pockety, the first dishwashing detergent in Japan to make use of reprocessed PET resin for the container. With further endeavor, the Company developed a technology to solve the longstanding issue of using reprocessed PET resin for transparent bottles.

A portion of containers used for the Lion dishwashing detergents Charmy Awa no Chikara (Power of Suds), which was released for sale in 2007, Charmy Mild and Charmy V Quick is blended with at least 20% reprocessed PET resin from plastic beverage bottles. Furthermore, measure spoons for powdered laundry detergents use reprocessed resin made from discarded home appliances such as washing machines



#### Utilizing Recycled Paper Blended with Recycled Pulp

Containers and packaging material for such products as toothpaste and laundry detergent use white paperboard blended with recycled pulp. Easy-to-read displays indicate that "70% or above recycled paper" is the composition ratio for powdered laundry detergent containers.



In addition, the composition ratio of recycled pulp for transportation cardboard is 94%.

In 2008, Lion Corporation conducted a survey related to discrepancy problems between recycled paper composition ratios and what is stated on displays, confirming that no problems exist with its products.

## 4 Handling Chemical Substances Appropriately

Lion pays full attention to safety and the environment and strives to thoroughly control and reduce chemical substances in the entire process, from product development to household use and disposal.

In addition, Lion verifies on an independent basis what impact MES—Lion's proprietary surfactant—has on aquatic environments.

### The Concept of Safe Handling of Chemical Substances

Chemical substances are necessary in helping to make our lifestyle congenial and comfortable. However, if appropriate controls are neglected, or if an accident were to occur, there could be significant impact on people's health and the entire ecosystem. As well as complying with related laws and regulations, Lion makes every effort to control chemical substances at every stage, from product development to household use and disposal.

### Product Development

#### Management of Chemical Substances in Lion Products

Chemical substances used in Lion's products are administered based on laws and regulations as well as the Company's proprietary criteria, starting with the process of raw material procurement.

#### Confirmation of Chemical Substance Safety

Lion participated in the OECD/HPV Program's<sup>\*1</sup> international consortium and cooperated in safety confirmation work for linear alkylbenzene sulfonate (LAS),  $\alpha$ -olefin sulfonate (AOS) and fatty-acid methyl ester (ME). In addition, Lion committed itself as a sponsor of MES in the "Japan Challenge Program"<sup>\*2</sup>, submitted a plan for collection of safety information and carries out safety confirmation work in cooperation with the Japanese government. In order to undertake the appropriate management of information related to chemicals and others, and to smoothly disclose and convey information to clientele, the Company also participates in the activities of the "Joint Article Management Promotion-consortium (JAMP)"<sup>\*3</sup>, and is developing mechanisms to manage chemical substances and disseminate information to its supply chains.

### Production

#### Complying with the PRTR Law<sup>\*4</sup>

The Production Division and the Research and Development Division submit reports regarding the emissions and transport volume of chemical substances covered under the PRTR Law on a yearly basis. During fiscal 2007, reports were submitted related to emissions and transport volume of twenty materials. The volume of linear alkylbenzene sulfonate and its salt (LAS) discharged into the atmosphere stood at 420 kg, which is a reduction compared with fiscal 2006. In addition, due to a sharp rise in the amount of ethylene glycol monoethyl ether being

handled, the amount discharged in the atmosphere has increased. Hereafter, Lion will take measures to reduce emissions at production facilities.

#### Voluntary Activities for Air Pollution Prevention

Lion is conducting voluntary activities to reduce chemical substances such as nitrogen oxide (NOx), sulfur oxide (SOx): particulate and volatile organic compounds (VOC) that cause air pollution. Lion was able to reduce VOC emissions in 2007 to 54% compared with the 2000 level and has already achieved the target of a 67% or below reduction of these emissions.

### Transport

#### Providing safety information during transport

In the case of the transport of raw materials and semi-manufactured products, "yellow cards" and "container yellow cards"<sup>\*5</sup>, which provide information related to emergency measures, are distributed and attached for transport personnel.

### Household Use and Disposal

#### Ecological Risk Assessment of chemical substances included in products discharged after household use

Surfactants that are contained in products are discharged into the environment after household use.

Every year, the Japan Soap and Detergent Association (JSDA), with which the Lion Corporation is affiliated, conducts ecological risk assessments of public water sources. The JSDA conducts these assessments four times annually, and reports on the concentration in river water of four types of surfactants found in water discharged from households. With regard to the surfactant MES, Lion independently conducts similar assessments. These surveys have confirmed a nominal impact on the ecosystem.

<sup>\*1</sup> OECD/HPV Program: An approach to establish a database and disclose the results of environmental and health impact from High Production Volume (HPV) chemicals (those that are produced in quantities over 1,000 tons per year) conducted by the Organization for Economic Co-operation and Development (OECD)

<sup>\*2</sup> The Japan Challenge Program: This is a program that ties together industry and the Japanese government, accelerating the collection of safety information regarding existing chemical substances and distributing this information to a wide range of citizens

<sup>\*3</sup> Joint Article Management Promotion-consortium (JAMP): This is an entity that was established to manage chemical substances within products and to disseminate specific mechanisms that facilitate disclosure/conveyance of such information along the supply chain

<sup>\*4</sup> PRTR Law: The Pollutant Release and Transfer Register Law promotes steps for precisely understanding the emission volume of specific chemical substances into the environment as well as management improvements for this purpose. The PRTR Law requires businesses that handle chemical substances that may cause harm to human health and the ecosystem to independently measure the volume of these substances discharged into the environment or transfers of them from their place of business and to submit a report to the government regarding this

<sup>\*5</sup> Yellow Cards, Container Yellow Cards: This is a labeling system that contains information on the properties of chemical substances and emergency procedures in the event of a chemical leak during transport

# Environmental Care through the Chemicals Division Business

## The Chemical Division's Environmental Solutions Business

In addition to its health care and household product businesses, Lion has the Chemicals Division, which provides industrial chemicals to each industry.

Given the increasing social demand in recent years for environmental-friendliness among customers of the Chemicals Division, Lion Corporation has been striving to solve this issue by developing a wide range of products that reduce environmental burdens, thus supporting a sustainable, recycling-oriented society in areas not readily visible to the public.

## Plant-Based Chemical Products

Today, the majority of chemical products are made from petroleum. However, Lion is aggressively developing environmentally friendly industrial products by leveraging plant-based materials such as coconut oil and palm oil. Some of these products are raw materials used for ink solvents and as oil-spill dispersants.

Lion has recently succeeded in developing plant-based transformer oil (palm fatty esters) for electricity applied in substation transformers. This is beneficial to the environment because plant-based insulating oil is biodegradable and does not increase CO<sub>2</sub> in the atmosphere, and as a consequence, Lion obtained the environmental label "Eco Mark" in January 2008 for this transformer oil.

### ■ Plant-derived raw materials



Palm fruit



Fatty esters

Presently, transformer oil uses petroleum-based oils, of which approximately one million kilolitres is produced worldwide each year. However, this oil releases approximately 2.5 million tons of CO<sub>2</sub> when it is burned.

Lion is contributing to the curbing of CO<sub>2</sub> emission increases in the atmosphere by switching to renewable and carbon-neutral, plant-based oils.



High-capacity transformer (10 meters high, using 200 kiloliters of insulation oil)

## De-Inking Agent, Essential to Paper Recycling

To manufacture recycled paper from old newspapers and magazines, ink on the used paper must be removed first. This process is called "de-inking." Referred to as recycled paper cleaning, this technology is one of Lion's strong points. Consequently, Lion has been extensively providing de-inking agents used in this process to domestic and overseas paper manufacturers and has supported domestic paper-recycling manufactures for over 30 years. The Company now markets de-inking agents in Europe, the United States and the rest of Asia.

## Aqueous Detergents with Less Environmental Burden

There are a number of cleaning processes necessary to complete the manufacture of increasingly higher-performance electric component parts. Although there have been cases where some of these cleaning processes used detergents that contained ozone-layer-destroying fluorocarbons, environment-friendly detergents are increasing in use. Given this trend, Lion utilizes its proprietary microemulsion technology to develop and offer aqueous detergents that contain absolutely no ozone-depleting materials. Because their base component is water, these aqueous detergents are environmentally friendly and safe for people to use, while featuring minimal environmental burden. These aqueous detergents are presently used in the manufacturing processes for such items as hard disk drives (HDD) and liquid crystal displays, and in addition to electronics manufactures, Lion is supporting the environmental measures being undertaken by automobile manufactures.

### ■ Aqueous detergent's cleaning effect

Lenses prior to washing



Lenses after washing



Enlarged Lens surface



Enlarged Lens surface

Aside from the products already mentioned here, Lion markets sophisticated industrial chemicals in Japan and overseas that are playing a key role in environmental protection on a global scale.

## 5 Fostering Environmental Awareness within the Lion Group

To further increase environmental awareness among all employees engaged in ECO LION activities and to encourage voluntary environmental activities, Lion implements environmental education and provides facilities to carry out these activities.

### Implementing Periodic Environmental Education

In order to encourage voluntary environmental activities, Lion implements environmental education for all of its employees on a regular basis.

Lion provides such employee education programs as “Basic Environmental Education,” “Education for Environmental Managers,” “Education for Special Service Personnel,” “Education for New and Transferred Employees,” and “Education to Foster Internal Environmental Auditors.”

Furthermore, the Company regularly publishes general information about the environment and environmental activities undertaken by the Production Division, the R&D Division and offices in its in-house magazine. In 2007, this magazine reported on such company-wide environmental events as the establishment of the Three-Year Medium-Term Environmental Plan and Lion being awarded with the 16th Grand Prize for the Global Environment Award, along with the introduction of environmental initiatives undertaken by the Odawara Factory, the Osaka office, and the Packaging Engineering Research Laboratories. Lion will continue to increase employee awareness of environmental issues.

relevant periods, stimulating employees’ attention regarding relevant environmental issues. In addition, because it is important to succeed in increasing the cooperation of every employee, the results of activities undertaken by all Lion employees are reported.

Details of the Team Minus 6% Project’s specific measures and results are included in the “Reducing Greenhouse Gas Emission” section on pages 22 and 23.

### Implementation of the ECO LION Proposal Campaign

As part of ECO LION activities, Lion has been holding the “ECO LION Proposal Campaign” since 2006 to invite submissions of ideas related to ecological themes from as wide a range of employees as possible. The four themes for this year include: (1) eco product proposals; (2) community service activities; (3) operational efficiency; and (4) cost reduction. The total number of ideas posted in 2007 was 2,297. As this campaign will be held on an ongoing basis, Lion encourages as many employees as possible to participate.

### Fostering Environmental Awareness through Support for Nature Conservation Activities

Lion began undertaking forest trimming support activities in 2006 and opened “Lion Forest in Yamanashi” as its first project of the “Company Forest Promotion Project” conducted by Yamanashi Prefecture. We recruit volunteers among employees annually for this purpose. In 2007, this activity was held twice, with 42 employees participating (please refer to p. 14).

In addition, Lion is conducting nature conservation activities on an independent basis in each region. For example, the Company proactively protects endangered species in the Odawara area.



In the in-house magazine, Lion features special topics regarding environmental preservation activities and runs a column entitled “ECO MODE,” aiming to enhance employees’ environmental awareness.

### All Lion Employees Participate in Japan’s Team Minus 6% Project

In order to thoroughly implement each measure of the Team Minus 6% Project—which Lion has been participating in since July 2005—corresponding to the “Cool Biz” and “Warm Biz” seasons, Lion disseminated the outline of the project by means of posters and internal employee email during the