

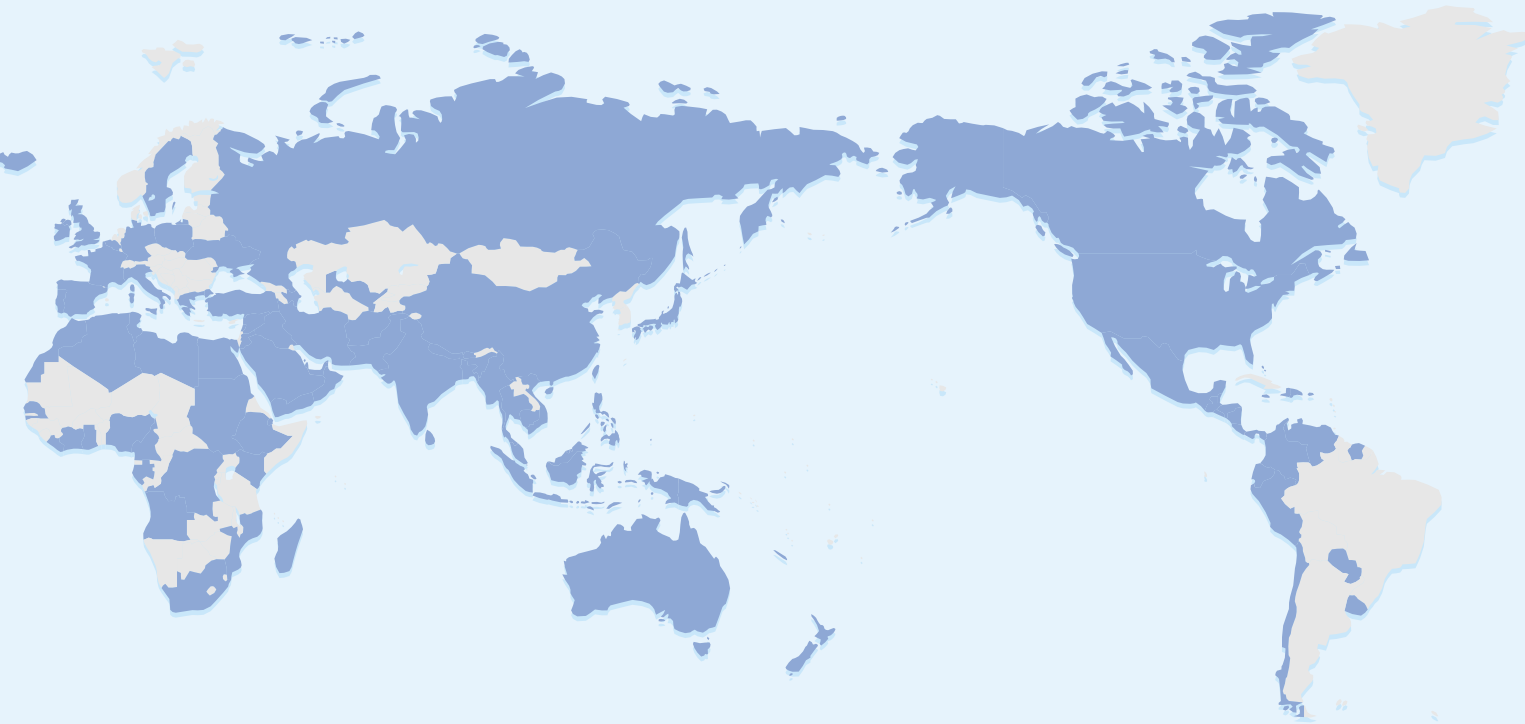
ISUZU MOTORS LIMITED  
**Environmental &  
Social Report  
2007**



# Outline of Isuzu

Our vehicles and engines are manufactured and sold in countries around the world to support the daily lives of people.

Countries/regions that sold Isuzu vehicles and engines in FY2006



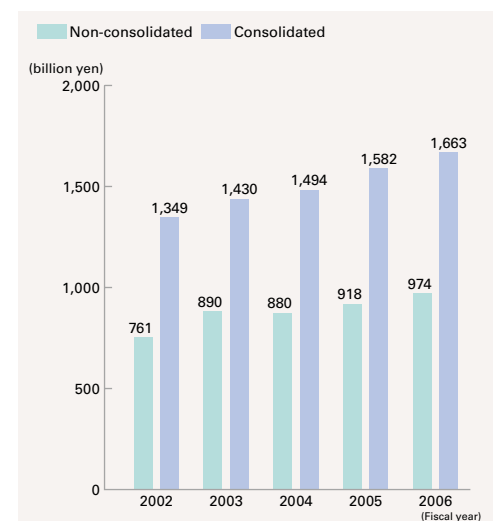
## Products



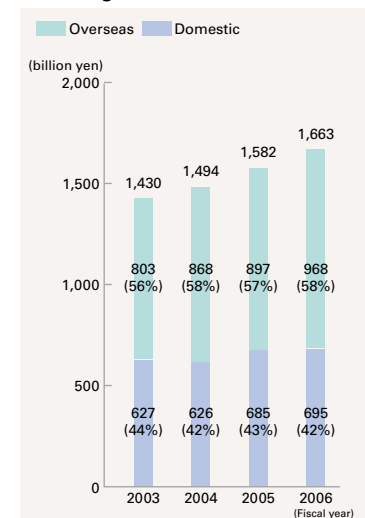
## Corporate Facts (as of March 2007)

Company name: Isuzu Motors Limited  
 Chairman and Representative Director: Yoshinori Ida  
 President and Representative Director: Susumu Hosoi  
 Headquarters: 6-26-1 Minami-Oi, Shinagawa-ku, Tokyo 140-8722, Japan  
 Established: April 9, 1937  
 Capital: ¥40.6 billion  
 Business operations: Manufacture, sales and service of motor vehicles, transport machinery and tools, engines and related parts and materials  
 Sales: Non-consolidated, ¥973.9 billion; Consolidated, ¥1,662.9 billion  
 Ordinary profit: Non-consolidated, ¥68.3 billion; Consolidated, ¥114.7 billion  
 Vehicle sales: Non-consolidated; 96,000 sold in Japan, 149,000 exported  
 Consolidated; 97,000 sold in Japan, 372,000 overseas  
 Main products: Heavy-, medium-, light-duty trucks, pickup trucks, utility vehicles, buses, engines and components  
 Number of employees: Non-consolidated, 7,750; Consolidated, 23,200  
 Offices and plants: Headquarters, Fujisawa Plant, Tochigi Plant

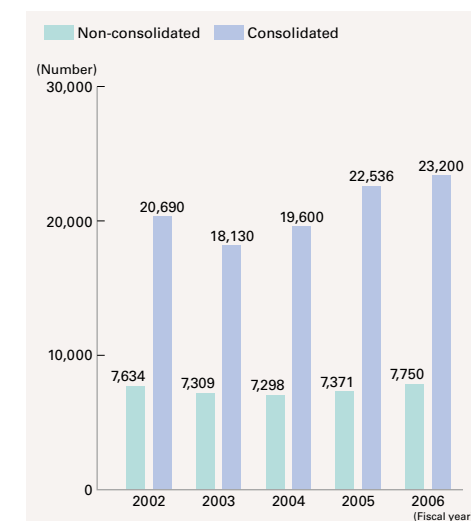
## Sales



## Domestic and Overseas Consolidated Sales/Percentage



## Employees



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## Editorial Policy

This is our ninth annual environmental and social report. The report is compiled to enable all readers to understand easily how we are working to create a sustainable society. We also aimed at improving the social aspect of the report, in addition to the environmental aspect. The Japan Ministry of the Environment's Environmental Reporting Guidelines and GRI's\* Sustainability Reporting Guidelines were followed as references in the process of publishing this report. We would appreciate your comments via the enclosed questionnaire.

\*GRI: The Global Reporting Initiative is an international organization that has the goal of establishing guidelines for environmental, social and economic sustainability reporting for use worldwide.

## Scope of the Report

This report primarily covers Isuzu Motors Ltd.'s environmental activities but also includes domestic and overseas group activities.

## Period Covered

This report includes data from fiscal year 2006 (April 1, 2006 to March 31, 2007) and also features some recent activities.

# Backed by a Wealth of Experience and Expertise, Isuzu Will Always Mean the Best



*S. Hosoi*  
**Susumu Hosoi**  
President and Representative Director  
Isuzu Motors Ltd.

## We make continuous efforts to develop and supply leading-edge products from a global standpoint

April 2007 marked the 70th anniversary of the founding of Isuzu Motors Limited. We would therefore like to take this opportunity to sincerely express our thanks and appreciation to all who have supported us over the years. Without you, we would not be where we are today.

Having been appointed president in this landmark year, I am more determined than ever to tackle the various challenges of management to the best of my ability so that we may move closer to achieving our goals for the next 10 and 20 years.

Although Isuzu was officially established in 1937, its root can be traced back to 1916, making the company one of the oldest automobile manufacturers in Japan. From the start, Isuzu has been engaged in the development, manufacture and sales of commercial vehicles and diesel engines, and has thereby helped to improve the lives of people throughout the world by actively contributing to

better logistics. Today, our products are sold in more than a hundred countries worldwide, where they meet contemporary requirements and the ever-changing needs of customers.

Decades of international business experience have allowed us to not only overcome great hurdles but also gain many valuable lessons in the process. As one example, we have learned that although safety, fuel efficiency and low emission levels are now common performance requirements for trucks and diesel engines in the global arena, driving conditions in each region or country can vary greatly. In this regard, the newly launched ELF and FORWARD, which embody our broad experience and expertise, are solutions we are proud of. Amid a drastic shift from developing products while focusing on domestic conditions, the new models are pivotal in that they meet global requirements by giving maximum consideration to global standards regarding safety as well as economic and environmental performance. Furthermore, we are confident that these new and unique models are capable of delivering an unprecedented standard of excellence in terms of all of the abovementioned performance indicators.

Solving the problems of logistics and environmental preservation now being tackled by many countries throughout the globe is no easy task. We consider our contribution in helping to alleviate these problems, even if to a modest degree, through the provision of products that are kinder to the earth as one of Isuzu's core missions as a world-class supplier. Without becoming complacent, we will do our best to supply products that meet the needs of our customers.

## We will utilize our strengths as a top-class automaker to contribute to the environment and the community

The most important thing in protecting the global environment is to first understand the current situation of countries worldwide so that we may clearly identify what needs to be done and advance toward these targets in unison.

Keeping in mind that halting global warming is an important global target, and the related need to reduce CO2 emissions in order to achieve this goal, diesel engines are attracting great attention as one of the automobile industry's most potent environmental solutions.

Isuzu is thus determined to fulfill its corporate responsibility as a diesel engine specialist through rapid and economical development

of clean diesel engines with high fuel efficiency.

In developing the new ELF and FORWARD, we focused on developing and manufacturing diesel engines that not only boast the world's highest fuel efficiency, but also achieve minimum engine displacement while assuring an output and torque equivalent to conventional engines. The result—a new style diesel engine that realizes ultimate performance in terms of both fuel efficiency and quietness.

In addition to efforts to improve the environmental performance of our products, we have also been long engaged in various measures to improve economic performance.

While the primary focus in developing commercial vehicles is on optimizing their main purpose, namely cargo transport, simply driving them without paying attention to driving techniques as a means to achieve fuel savings and boost efficiency is no longer good enough. Only through changing driver awareness, which in turn leads to greater fuel efficiency, can the full potential of a vehicle be truly realized. Besides supplying commercial vehicles and diesel engines, Isuzu has long been engaged in the promotion of education activities both at home and overseas to raise awareness among users in regard to more fuel-efficient driving styles.

Furthermore, we are actively involved in proposals to establish ever more efficient logistics systems. As one example, our advanced vehicle diagnostic and information system, *Mimamori-kun* Online Service, which has won high praise from customers, was developed as a tool to improve the efficiency of logistics management and quality and contribute to fuel-saving efforts and driving safety.

Though still modest in size compared to other global automakers, Isuzu has a unique advantage in that it is able to offer its customers both hardware (products) and software (usage know-how) solutions, thereby contributing to the global logistics industry from both environmental and economic performance aspects. Another advantage of Isuzu comes from its long-standing ties

overseas. Exploring these two advantages to the fullest, we will maximize our future ability to contribute to the environment and the community via fields in which we can thoroughly utilize our strengths and expertise.

## Realizing our corporate vision by becoming indispensable to customers

Isuzu makes constant efforts to achieve its corporate vision of becoming the "Global Leading Company in commercial vehicles and diesel engines." While "Leading Company" could be defined in a number of ways, in our vision this term represent a company that can continue to attract customers throughout the world "who acknowledge the excellence in quality, environmental performance and fuel efficiency of Isuzu's commercial vehicles and diesel engines;" "want to use Isuzu's products;" and "experience satisfaction in using the Isuzu brand." In addition, we strive for the ideal situation in which our sales volume and market share grow as a result of the solid reputation of our brand in both domestic and global markets where our products are distributed.

Through planned and steady initiatives to gain the trust of customers and through activities that raise the value of the company in the eyes of the customer, we are confident we have what it takes to become the Global Leading Company we envision.



## Corporate Vision

Isuzu will always mean the best

A leader in transportation, commercial vehicles and diesel engines, supporting our customers and respecting the environment.

# Isuzu's Approach to Stopping Global Warming

Isuzu is striving towards halting global warming in an attempt to be a global leading company also in the aspect of environmental protection.

## Isuzu's Approach to Environmental Protection Penetrates All Corporate Levels

When talking about environmental degradation, it is not a 50- or 100-year issue. Environment degradation has become so advanced that we cannot neglect the situation any longer without doing something. To better preserve the environment for the next generation, we need to do everything we can right now.

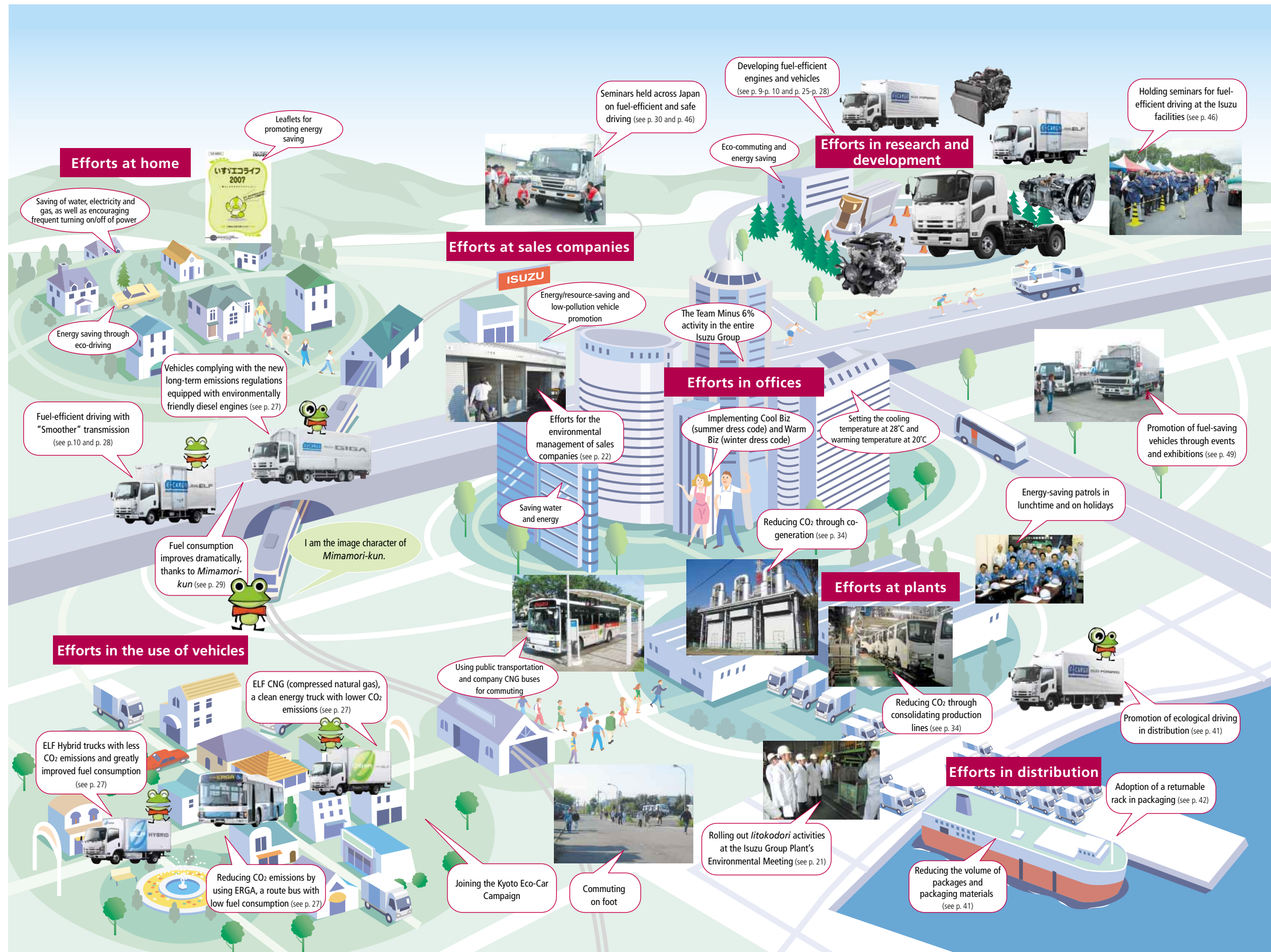
Firstly, Isuzu can contribute to the protection of the global environment by developing and producing environmentally friendly commercial vehicles and diesel engines and supply these to entire world. This will be a significant step towards stopping the progress of environment degradation. In the current trends of globally increasing fuel costs and the enhancement of environment awareness, commercial vehicles and diesel engines with high economic efficiency and ecological benefits are attracting more and more public attention. To address our customers' needs and these of society, Isuzu has launched new models and engines in succession, which can drastically improve various properties such as fuel efficiency, vehicle weight and exhaust gas emission.

Isuzu's approach to environmental protection should cover every aspect of our business including production, sales, service and logistics. Our activity needs to be positively extended to various scenarios in our business, even if these activities are conducted outside of the workplace.

Supported by the enhanced awareness of each employee, Isuzu is determined to focus its efforts on activities to protect the environment in order to preserve a clean environment for the next generation.



**Naotoshi Tsutsumi**  
Global Environment Committee, Chairperson  
Executive Vice President



Isuzu launched its new ELF in December 2006, followed by the launch of the new FORWARD in May 2007. We will report on the enthusiasm of the people who were directly involved with this development, called the "700 Project" (700P) internally.

### Development of light-duty and medium-duty trucks as a group

**Yamamoto:** Isuzu's base concept for development is See Technology. See is the acronym for Safety (S), Economy (E) and Environment (E), each of which is the target of our technological sophistication. "700P" is a project for developing globally-popular trucks based on the global deployment of See Technology, which we call SEE GLOBAL.

The most characteristic point of 700P is the development of light-duty and medium-duty trucks as a group. Our light-duty truck, the ELF has been marketed in over 100 countries around the world and the infrastructure of its overseas production has been established at a certain level. Furthermore, our medium-duty truck the FORWARD has the potential that can compete with international forerunners in this market. With improved price competitiveness, this model could drastically increase its market share in overseas markets. This is why the FORWARD is significantly benefited by parts-sharing with the infrastructure established for the ELF.

700P is one of the biggest projects in our corporate history, where drastic modifications have been made to cabs, engines and chassis with a focus, not only on the domestic market, but also on the world market from the early stages of development, by considering the ELF and FORWARD as a set.

**Hirao:** A noticeable characteristic of the new ELF is the introduction of a 1,770 mm wide high-cab, reflecting a regulatory change in drivers' licenses<sup>1</sup> and an engine downsizing. While the standard displacement of a light-duty truck is 4.5-5 liters, we employed a 3-liter model for the new specifications, from environmental and economical standpoints. We were concerned about the power at first. But, after all, we could develop an engine equivalent to those

in the 4.5-5 liter class. As a result, conformance to the new long-term emissions regulations, certification for low-emission heavy-duty vehicles and the 2015 fuel efficiency standard could be achieved, ahead of our competitors.

In the framework of the new drivers' license, vehicle weight had to be reduced by approximately 250 kg versus conventional models in order to ensure a total load capacity of 2 tons, within the gross vehicle weight category of less than 5 tons. A reduction in chassis weight was an important factor in achieving the total vehicle weight.

### Challenging the limits in weight reduction with step-by-step efforts

**Fujii:** While the development of the FORWARD had been conducted by the group that was involved in the development of our GIGA heavy-duty truck, the FORWARD was "married" to the ELF in 700P. The cab was listed as one of the main development points. The unique point of the ELF is the extremely frequent vehicle entry and exit by the driver because of its targeted urban application. Meanwhile, the FORWARD will more often be used for medium-or long-distance driving. It was extremely difficult for us to develop the cabs of each of these models based on an identical base. However, we successfully addressed this challenge, which is one of most significant



Vehicle Planning and Engineering (Chief Engineer):  
Etsuo Yamamoto



New FORWARD



Vehicle Planning and Engineering (FORWARD Team):  
Mikiya Fujii

### Creation of a comfortable truck

**Hirao:** One of the sales points of the new ELF is its extreme quietness. We have received many encouraging evaluations from our customers, who mention tranquility as their initial impression. Some say that they feel as if they are driving a passenger car. Such a positive evaluation honored us because noise reduction was one of our special emphases during development.

**Fujii:** The same evaluation is applicable to the FORWARD. We are proud that we could create a truck that is quieter than those of our competitors. Another positive reaction from customers was the fuel efficiency and environmental performance. Certification for low-emission heavy-duty vehicles and the achievement of the 2015 fuel efficiency standard for heavy-duty vehicles as well as a 2% reduction in vehicle acquisition tax (valid until March 31, 2008) had the most significant influence on this project. While we faced many challenges during development, we now feel that we have been rewarded when hearing such encouraging reactions.

**Yamamoto:** Public perception of diesel engines was not favorable because of the high noise level of trucks. However, we think we can change this image with the 700P project. We are confident that both the ELF and FORWARD are truly comfortable vehicles to drive, though some might think that I am boasting. The cabin is very quiet with low vibration levels. Thanks to the improved Smoother models (ELF: Smoother Ex, FORWARD: Smoother Fx), drivers do not need to use the clutch pedal or change gears. Because of this improvement, drivers fatigue is significantly reduced and they can concentrate more on driving, resulting in safer driving.

Based on our experience with the 700P project, we are determined to give our best efforts to addressing contemporary needs in vehicle development.

merits of the new cabs. The 4-cylinder engine is a most significant point because the conventional engine was a 6-cylinder type.

In addition to the cab, engine and transmission, weight reduction was also carried out on the chassis, resulting in a total reduction of 200 kg. Furthermore, to address the requirements of the new drivers' license of medium-duty trucks<sup>2</sup>, we developed a new 11-ton truck with the purpose of offering versatile models. The lighter the vehicle, the more customers can use it efficiently in respect to load capacity, in addition to the reduction in CO<sub>2</sub> emissions because of improved fuel efficiency. Our efforts to achieve weight reduction were intended to achieve both of these objectives.

**Hirao:** One of the reasons for the high evaluation of the ELF is the aspect of high reliability and durability. To be honest, we went to tremendous lengths to achieve weight reduction without betraying this expectation. Specifically, the chassis is a component that you cannot modify significantly. Therefore, we reviewed its parts one-by-one in an attempt to reduce the weight of each part slightly.

**Fujii:** While rigidity is the essence of cabs, our challenge in the FORWARD project was to reduce the weight by 30 kg. This is a weight reduction of about 10% assuming that the weight of the steel panel is about 300 kg. We managed to achieve this reduction by fully utilizing computer-assisted analysis methods to maintain and improve basic structural strength.

**Yamamoto:** Another characteristic of 700P was the full utilization of 3D CAD (a computer-aided design tool) together with the analysis method. Before the actual fabrication of a pilot vehicle, a virtual vehicle was constructed using a computer and various design factors were reflected in the drawings by conducting a series of processes. Because the actual pilot vehicle was fabricated after this process, we could achieve very efficient development by minimizing the number of pilot vehicles that had to be fabricated. In this sense, we are proud that we could contribute to resource conservation in the development stage as well.



Vehicle Planning and Engineering (ELF Team):  
Satoshi Hirao



New ELF

1: The regulatory change in drivers' licenses refers to a new drivers' license system to be implemented in June 2007. The maximum limit of a general drivers' license has changed to less than 5 tons for GVW (gross vehicle weight) and less than 3 tons for load capacity.

2: The new drivers' license for medium-duty trucks refers to a new drivers' license system to be implemented in June 2007. In the new system, vehicles with a GVW of 5-11 tons and maximum load capacity of 3-6.5 tons are categorized as medium-duty trucks, for which a driver's license for medium-duty truck becomes mandatory.

# Seven Stories: Supporting the 700P Project

700P is a large project that is supported by the commitment of an enormous number of staff who carry out various functions. We will focus on the stories of seven people who were involved in this development project.



## I am excited by the news of winning the Good Design Award

The main objectives of the design development of the new ELF/FORWARD were: 1) a functional design, taking safety into consideration; 2) aerodynamically excellent geometry that contributes to improved fuel efficiency; and 3) the promotion of using environmentally friendly material to enhance recycling performance. To achieve these objectives, we set our style concept as "Solid & Sculptured" for the exterior and "Evolved Professional Gear" for the interior. Meanwhile, we conducted design assessment by aggressively seeking aerodynamic performance and through driving tests. The most challenging aspect was the process used until we could produce a design that completely matched the styling concept. Although our cabs are designed to realize a rectangular structure, the goal of achieving the tumble form with vertical geometry of the side of cabs in conjunction with other departments proved trying from the start of this project to the stage immediately before commercial production. This battle included arguments about the door glass layout and press forming. Furthermore, to improve aerodynamic performance, we repeated the cycle of modeling, analysis and wind tunnel testing almost endlessly. As a result, we are proud that we can present an innovative new styling. We are honored that our high and wide cabs won a Good Design Award in 2006.



Design Engineering Team:  
**Takahiro Uematsu**

\* Solid & Sculptured: Taut, massive feeling and sculptural forming with depth/Evolved Professional Gear: User-friendliness as a professional tool

## Designing safe and light-weight body



Body/Exterior Engineering Team:  
**Tatsuya Okamoto**

Development promoted the objectives of: 1) an improvement in fuel efficiency by improved aerodynamic performance; 2) employment of a modular design\* by using common specifications between the ELF and FORWARD for unit parts\*; and 3) a reduction in the type and number of parts, by designing common parts. Furthermore, we tried to eliminate the resin finish on the interior trimming\* from the specifications, employing the slogan "Bare Skin Beauty." Concerning the aerodynamic characteristics of the body, we had repeated discussions until we felt that both design and stylistic requirements could be satisfied, while giving full consideration to the compatibility of the common factors between the ELF and FORWARD. To achieve the "Bare Skin Beauty" target, we tested the review from the cabin by using CAD in setting the bead\* to ensure surface rigidity. We also spent a lot of time modifying body panel configurations. We often worked until midnight. For weight reduction, we reduced the panel thickness to the limit, while high-tensioned material\* or tailored blank material\* was used for sections requiring high strength and rigidity in order to design a safe and light body. Recycled materials were used in the interior and exterior with the focus on our approach to addressing VOC (volatile organic chemicals such as formaldehyde and toluene) regulations to be implemented in future. In addition, we minimized the use of harmful controlled chemicals and employed a surface treatment free of hexavalent chromium.



\* Unit parts: an assembled part that constitutes a unit/Module design: A design to allow a consolidated function by gathering several parts, each of which constitutes a single unit/Trimming: Interior wall components/Bead: Control the strength and rigidity using extrusions or concavities/High-tensioned material: Steel panel with high tension treatment/Tailored blank material: Panels made by welding together multiple steel panels with different panel thickness or quality

## Striving for light weight and compact size

I was involved in the planning and development of the 4JJ1 engine, an innovative component integrated in the new ELF as its main engine. To address the reinforcement of emission gas regulations, ecological trends supporting CO<sub>2</sub> reduction and the introduction of the new drivers' license system, we tried to enhance the torque per emission level as much as possible while striving for weight and size reductions so that various dynamic performances required for engines such as fuel efficiency, weight and emission gas would be drastically improved. As a result, conformance to the new long-term emissions regulations and certification for low-emission heavy-duty vehicles of a 2005 standard could be achieved. Furthermore, it is the first vehicle in the diesel 1.5 tons/2-3 tons class (except for hybrid vehicles) that satisfies the fuel efficiency standard for heavy-duty vehicles (T1-T3 categories.) In addition, further improvement was made in respect of the much acclaimed noise reduction performance. Specifically, we took pride that we could minimize the idling noise to the lowest level, in comparison to our competitors. At first, there were some concerns about the durability of the light and compact engine. Nevertheless, after skeptics experienced a test drive, all of them voiced their surprise and admiration. Undoubtedly, this is a result of a design that focused on maximizing the advantages made available by adopting a smaller displacement engine.



Engine Planning and Engineering Team:  
**Yoshihisa Koizumi**



## Satisfying both emission gas reduction and improvements in fuel efficiency



Engine Planning and Engineering Team:  
**Makoto Takeuchi**

I was involved in the planning and development of the 4HK1 and 6HK1 engines: the main engines integrated in the new FORWARD. As development objectives, a reduction in emission gas and noise levels in the ecological aspect, the improvement in fuel efficiency and reduction in running costs in the economic aspect, and the development of a highly-reliable engine in the safety aspect were targeted. By positive use of electronic control technology, supported by in-house software and based on Isuzu's unique next-generation clean I-CAS technology and next-generation high efficiency diesel D-CORE engine series, the new long-term emissions regulations and the 2015 fuel efficiency standard could be achieved. These engines also comply with the requirements for low-emission heavy-duty vehicles certification. Concerning the ecological aspect, these models can operate in the early morning and at night in residential area, thanks to the vehicle's superb tranquility. A reduction in running cost has been also achieved by extending the replacement interval of the engine oil filter from 15,000 km to 20,000 km. We are confident that these engines successfully address the needs of contemporary society by satisfying various requirements, such as a reduction in emission gas, improved fuel efficiency, noise reduction and an assurance of reliability. Many customers who drive these models gave us a very positive evaluation, pointing out their superb dynamic performance and quietness.



## Smooth starting and acceleration



Smoother Engineering Team:  
**Masahiko Hayashi**

I was involved with the design and development of the general aspects of "Smoother Ex," a transmission system that has been integrated in the new ELF. Smoother Ex is the developed and improved version of the Smoother E Series. It is a new drive system developed to achieve the fuel efficiency equivalent of a manual transmission as well as a maintenance-free clutch and easy-driving characteristics. With the realization of automatic transmission and sequential manual transmission, even drivers with a license limited to automatic vehicles can drive this model. In developing the new ELF, we placed special emphasis on improving performance, driving comfort and weight reduction. Concerning performance and driving comfort, we fabricated prototypes under a tie-up with the Isuzu Advanced Engineering Center. By identifying optimal specifications based on prototypes, we made our decision on the specification changes for the clutch mechanism. Regarding weight reduction, we managed to produce a high-quality hydraulic unit on a commercial basis through cooperation with the manufacturing division, from the prototype phase, by positive use of Isuzu's die cast technology. Thanks to these efforts, Smoother Ex achieves a significant improvement over shift operation performance. Moreover, it is exceptionally well matched with the new 4JJ1 engine, allowing smooth starting and acceleration, which could never have been expected in conventional trucks. Through significant mitigation of shock and transmission time lag, the feel of the transmission could be drastically improved.



## Development from the customers' standpoint



Validation Team:  
**Tsutomu Yamazaki**

With the recent trend of increased concern about global warming, fuel efficiency in itself means environmental performance. Giving consideration to the fact that the increasing crude oil price has become a serious concern for corporate management, we set our development target as the improvement of fuel efficiency compatible with dynamic performance through high output with smaller displacement. Even if the fuel efficiency is excellent, customers will not be satisfied if dynamic performance is poor. To achieve dynamic performance that matches the customers' expectation without compromising fuel efficiency, we carried out repeated evaluations by conducting vehicle tests by constantly changing engine characteristics. Focusing on the question "How can we satisfy our customers?" we finalized the specifications one by one. In addition to the assurance of both fuel efficiency and dynamic performance, we could achieve excellent noise reduction inside and outside the vehicle as well. Such quietness will minimize neighborhood disturbance caused by early morning and late night deliveries and also contribute to mitigating driver fatigue levels. Frankly speaking, I felt that this project would be hard to tackle in the early stages of development. However, it was unexpectedly completed with great success. Based on this experience, we are determined to make further commitments with the enthusiasm necessary to make the impossible, possible.



## Recognizing the significance of the responsibility for quality



Manufacturing Team:  
**Tadanao Yamamoto**

As a member of the manufacturing division, I am responsible for assessing whether or not the project can proceed to commercial production. Now, an awareness of the significance of the responsibility for our products is greater than my excitement at launching a new model into the market. Once commercial production has started the products are distributed in the market and we can do nothing more. To prevent quality problems, we need to continue producing high-quality products. I often felt the pressure of our responsibility through our commitments to 700P: for instance, when I gave permission to proceed to commercial production, when the first vehicle left the mass production line, when I attached an "OK" sticker to the vehicle for shipment in the line-off ceremony and so forth. It was around 10 p.m. when the first vehicle left the mass production line. When I attached the sticker to the vehicle, I felt as if my daughter was leaving home for her wedding ceremony. The biggest challenge now before us is to achieve horizontal deployment of product quality equivalent to that of the Fujisawa Plant around the world. As a first step, we need to promote standardization in the country where KD (knockdown) production of 700P will be started.



A Stakeholder Meeting was held to discuss the themes of "Expectations towards the prevention of global warming" and "How should we approach society?" (Opening Date: June 15, 2007.)

## Is Isuzu contributing to the prevention of global warming?

**Masui:** Isuzu is a company that is well-known for its diesel engine. Its diesel engine technology has been highly acclaimed, even by competitors, and Isuzu's contribution to the environment through engineering power is worthy of high acclaim. However, the environmental issue is not the kind of issue that can be solved through the efforts of one company alone. To achieve higher effects, mutual cooperation among administrative bodies, cargo shippers and logistic service providers are indispensable. As a leading company, we think we need to focus more on this aspect in future.

**Sato:** We often hear favorable comments from truck drivers about Isuzu's Smoother<sup>1</sup> technology. Giving consideration to the fact that

even drivers with a license limited to automatic vehicles can drive these vehicles, which reduce driver fatigue, and that environmental performance has been improved, the quality of the model as a truck has been drastically enhanced. This model is worthy of receiving high acclaim for this aspect. On the other hand, further verification may be needed in the future to determine whether or not a real improvement in fuel efficiency has been achieved.

**Yokoe:** Aiming to reduce drive fatigue and improve fuel efficiency, the smoothness of the new ELF and FORWARD models has been limited to only an automatic shift transmission. Although considerable differences have been observed in fuel costs from driver to driver, these differences can be significantly decreased by adopting automatic shift transmissions. Please check this point for yourself, based on the statistics of the actual fuel cost.



**Kamoshida:** It is important to analyze the facts around us numerically, concerning issues such as fuel efficiency and global warming, because numerical data allows us to manage our environment more easily. In this sense, we admire efforts to reduce environmental impact through "Mimamori-kun"<sup>2</sup>, not to mention the high praise of Isuzu's diesel technology.

**Kaneko:** While the automobile industry makes products with a high environmental impact, it is also possible to contribute to the environment by improving fuel efficiency and making emission gas cleaner. We can evaluate Isuzu's approach to the new technologies, not only with diesel engines, but also in CNG vehicles<sup>3</sup>, for which Isuzu shares the top position. However, I think more positive public communication is needed to publicize these advantages.

**Tsutsumi:** The diesel engine and *Mimamori-kun* are some of Isuzu's important efforts and I am much honored that these efforts are receiving favorable reactions. Furthermore, I take a pride that Smoother technology is making a significant contribution to the workload reduction in delivery work in a declining birth rate and aging society, because this technology allows female, young and elderly drivers to drive a truck safely and these members of the population are increasing in the total driver population.

more impressive if Isuzu is courageous enough to targeting a reduction by more than 8% in total CO<sub>2</sub> emissions because the Kyoto Protocol which serves as a target in our country adopted the total level system. It would give a better impression to the general public if we positively advocate initiatives based on the total level, to be consistent with the Kyoto Protocol.

**Sato:** Thinking of the fuel costs, the effect of idling while waiting for traffic signals is very significant. Nevertheless, considering that vehicles require temperature control, idling may cause the compromising of cooling performance. While this may be the type of issue to be addressed by automotive equipment manufacturers, it is desirable that Isuzu, as a leading company in the commercial vehicle industry, be more committed to this aspect in cooperation with the automotive equipment industry.

**Kamoshida:** It is critical to promote an initiative to educate more consumers so that they will have a better awareness of the significance of global warming. Not to mention that Isuzu can propagate this message to the general public through its manufacturing activities and drivers who use Isuzu products may be able to play a role in delivering this message. I expect that Isuzu will reinforce its ability to involve these parties in its approach to addressing environmental issues.

**Yokoe:** We participate in various events such as the "Eco-car World" and "Eco-Products Exhibition" every year to introduce Isuzu's ecological efforts, including our trucks, diesel engines, low-pollution trucks, *Mimamori-kun* and so on. We will continue these activities in the future, as they may inspire people to take part in various ecological initiatives.

**Tsutsumi:** Hearing the comments of all the participants in this session, I feel that we can be more proud of our efforts in versatile areas to protect the global environment. In addition, I feel that we need to renew our determination to make further commitments to preventing global warming.

## Expectations of the prevention of global warming

**Masui:** To take appropriate action regarding environmental issues, we need to allocate 50% of our efforts to technology and the remaining 50% to mechanism. Although it is easy to understand technology, it is rather difficult to understand the mechanism. To promote the prevention of global warming, creating a mechanism to support this initiative is the most critical issue. As *Mimamori-kun* is one of these mechanisms, I want to make it easier for the general public to accept it.

**Kaneko:** Isuzu is targeting a reduction in CO<sub>2</sub> emissions by more than 8% per unit over FY2004 levels by FY2010. However, it may be

## Participants



**Kenji Kaneko:**  
Senior Editorial Staff, *Nikkei Ecology*,  
*Nikkei Business Publications Inc.*



**Kazuhisa Sato:**  
Officer & General Manager Logistics,  
*Seven-Eleven Japan Co., Ltd.*

### Participants from Isuzu



**Naotoshi Tsutsumi:**  
Executive Vice President and Executive Director,  
Chairman of Global Environment Committee



**Eiko Kamoshida:**  
Adviser, East Japan Chapter Operations,  
*Nippon Association of Consumer Specialists (NACS)*,  
Representative CS Management Office



**Tadayuki Masui:**  
Professor & Dean,  
Faculty of Environmental and Information Studies,  
*Musashi Institute of Technology*



**Kyosuke Yokoe:**  
General Manager,  
Program Management Department

## How should we approach society?

**Kaneko:** We have two proposals, namely, the “presentation of imaginative vision” and “creation of environmental activities promoting the users’ commitment.” I propose “imaginative vision,” because companies are requested to give dreams to the society they belong to. Based on this, I hope that Isuzu will advocate its vision that indicates the mechanism of green logistics in future, with the diesel engine as its core. It would give clear guidance to consumers, if Isuzu makes a proposal describing specifically how the diesel engine will be positioned in the future logistics industry. Concerning the “creation of environmental activities promoting users’ commitment,” on the other hand, one example may be the positive use of *Mimamori-kun*. Isuzu may contribute to tree planting, depending on the user’s eco-driving level by using *Mimamori-kun*. Such an ecological contribution by Isuzu as a reward for environmental activities conducted by its users may be a social activity that has great impact.

**Kamoshida:** The key element to enhancing consumers’ lives is logistics. Logistics ensure convenience in our lives. In this sense, Isuzu is always approaching society sincerely as a member that supports the logistics industry. I feel it is critical that Isuzu maintains this attitude in future. A company and society are tightly connected to each other through trust and contribution. While trust and contribution are eternal targets, you can expect a lot from hope if these two contact points are steadily established. When considering how Isuzu should approach society, my expectation is that Isuzu will establish an interface with society in a way that people can envision their hope in it. Namely, I hope Isuzu will contribute to society and society will trust Isuzu.

**Sato:** Referring to “stakeholders” in the narrow sense, it may mean truck users. However, if you consider this word from a broad standpoint, local communities and local residents should occupy a significant position. It is essential to appeal the importance of the roles played by logistics and trucks in our society in more positive manner. Riding in a truck is a truly enjoyable experience. When I participated in the trial driving of the new ELF, I was excited by its comfortableness and wide field of vision. The ideal way to appeal the importance and necessity of trucks is to communicate the fun of

driving them at the same time.

**Masui:** I want to make three proposals. The first one is the establishment of a KPI (Key Performance Indicator). People often say that environmental action is expensive and may deteriorate business performance if you spend too much money on it. However, it is essential to establish an index that contributes to the compatibility of business performance and environmental efficiency, based on our viewpoint that both business performance and environmental efficiency can be satisfied (business efficiency can be improved only by implementing environmental action). The second is the nurturing of fans. When we were children, we often toured a factory. After you visit a factory, you will become a long-term fan of the company. So, if we place more emphasis on invitations to our factory, we can nurture familiarity and a feeling of trust toward Isuzu among the general public. I hope this kind of activity takes place not only in Japan, but also worldwide. The third proposal is cooperation among companies. In this age of electronics, you can place order and make payment via the Internet. Nevertheless, you can’t deliver the ordered goods electronically. The logistics that deliver the goods from person to person, or from company to company, are indispensable in any age. To appeal this fact to society with the cooperation of cargo shippers and logistic service providers is very important.

**Yokoe:** It is very encouraging for us to hear the words like “imagination,” “hope” and “fan,” which have hardly been associated with manufacturing so far. It will provide significant guidance in our further efforts in environmental activities and social contributions. The things that Isuzu can do are limited. In this sense, I sincerely feel the importance of mutual collaboration across companies and industries. We should consider this point as one of our main emphases in future.

## Recommendations for the future of Isuzu

**Kaneko:** The cost of CSR has become a serious risk for companies. The power of shareholders is stronger in overseas countries and consumer movements are more active in comparison to the situation in Japan. No one can be assured that Isuzu is safe from being targeted by such parties. This factor can be a risk when it is



combined with CSR. We should be well prepared for any such situation. Because of this, it is critical to nurture fan populations or to encourage favorable reactions from the general public. Then the aspect of trust is also a very important from the standpoint of risk mitigation, not to mention the importance of nurturing feelings of trust that increase with the growth of the company in the global arena.

**Kamoshida:** From the global standpoint, traffic congestion in China and other Southeast Asian countries is considered to be a serious issue. Considering logistics in this context, it is one of the challenges to appropriately establish the positioning of trucks. Besides presentation of technologies and products, steady activities such as creating employment, developing human resources and building human networks in the local community are also critical for companies when they expand their business into the global arena and increase local production.

**Sato:** Speaking of traffic congestion, there is a strict regulation in Beijing that prohibits the entrance of trucks into the city center during the day. Because of this, delivery during the day is done with light vans or mini vans. It is worthwhile for Isuzu to consider including these models in its product lines, because these are not currently available. Furthermore, there is room to take local originality into consideration when designing vehicles, because regulations for emission gases are different from country to country. This issue should be reviewed together with the issue of addressing the imbalance in the development level of the road infrastructure and the number of vehicles.

**Masui:** I have three recommendations. The first is product deployment based on the identified concept of the role and significance of trucks in the global supply chain. I think this

approach will promote interesting product deployment. For instance, marine transportation is indispensable in logistical services between Japan and overseas countries. The most annoying part in this case is the loading and unloading of cargo. You need to have a truck that can address this challenge. The second recommendation is the creation of trucks that best match the specific regulatory requirements and road conditions in each country. For instance, if only unpaved roads are available in a country, safe and reliable vehicles must be supplied to those people. The third recommendation is the establishment of a quality assurance mechanism. With the progress of globalization, issues related to quality assurance may occur from an unexpected source. This is why we should constantly clearly identify who is responsible for each quality aspect. To achieve this, education to promote sincere attitudes to product quality is very important. Specifically, at overseas manufacturing sites, you need to take positive action for the education of human resources.

**Tsutsumi:** While it may sound like an unexpected fact, Isuzu developed its overseas business a long time ago and increased its performance steadily, in both production and sales. Furthermore, the company has been actively involved in employment creation and development of human resources in the local community of each country. In some countries, Isuzu represents the generic name for trucks. To reward those parties who have supported Isuzu to date, Isuzu is determined to contribute to local communities requiring supports for further growth in the future, also in fields not directly related to our core business. This is the realization of our company motto, “Isuzu will always mean the best.”



## Responding to the meeting

In the current meeting, we realized that Isuzu’s diesel engine and *Mimamori-kun* are attracting wide attention among people and we find it encouraging that they are highly regarded as efforts to contribute to the prevention of global warming.

While Isuzu advocates “See Technology” as its base concept of development, listening to various comments and opinions from the participants in this meeting, we are convinced that safety engineering, economic engineering and environmental engineering are tightly linked to each other and the direction that we are headed in is justified.

We are eager to make further commitments to development, production and

continuous improvement of these products in the future, as before.

To realize recommendations such as “imaginative vision” and “creation of fan populations,” we recognize that positive promotion and mutual collaboration among various parties including customers, companies in other sectors and people in local communities are critically important.

We will continue to provide opportunities to hear stakeholders’ opinions in the future. These opinions will serve as the basis for our efforts to be a company that supports environmental protection, including efforts to prevent global warming, and makes social contributions while ensuring close communication with our society.

(Tsutsumi/Yokoe)

1 “Smoother”: Manual transmission with an automatic gear shifting function. (See p. 10 and p. 27.)

2 *Mimamori-kun*: An advanced vehicle diagnostic and information system that analyzes driving data, provides advice for reducing fuel consumption and gives tips on safe driving. (See p. 29 and p. 30.)

3 CNG vehicles: Vehicles that use natural gas as fuel (See p. 27 and p. 49.)



# Corporate Governance

Isuzu makes much of corporate governance and improves its structure to ensure soundness, compliance and transparency of management.

## Basic Concept

In order for Isuzu to continuously make profits from its corporate activities and to enhance its corporate values, it is essential to complete the corporate governance structure that disciplines its activities. Furthermore, the principal aim of our corporate governance is to respect the viewpoints of all stakeholders and construct a good relationship with them—for example, to protect their rights and interests and to secure equality among them. For that purpose, we are striving to improve our corporate governance structure with a view to realizing optimum and prompt business determination, as well as effective management and re-enforced supervision of business operations. At the same time, we are working on timely and appropriate disclosure of critical information, including the release of financial information on our website, so as to ensure fairness and transparency.

## Our Corporate Governance Structure

In order to speed up managerial decision-making and business operations, Isuzu has set up a Management Committee that examines and decides on critical matters for corporate management, based on resolutions of the Board of Directors. In addition, we have introduced an executive officer system for properly supporting our directors' business operations. Additionally, the VLE (Vehicle Line Executive/ Powertrain Executive) system has

been introduced for ensuring inter-departmental activities maximize profits in each product line.

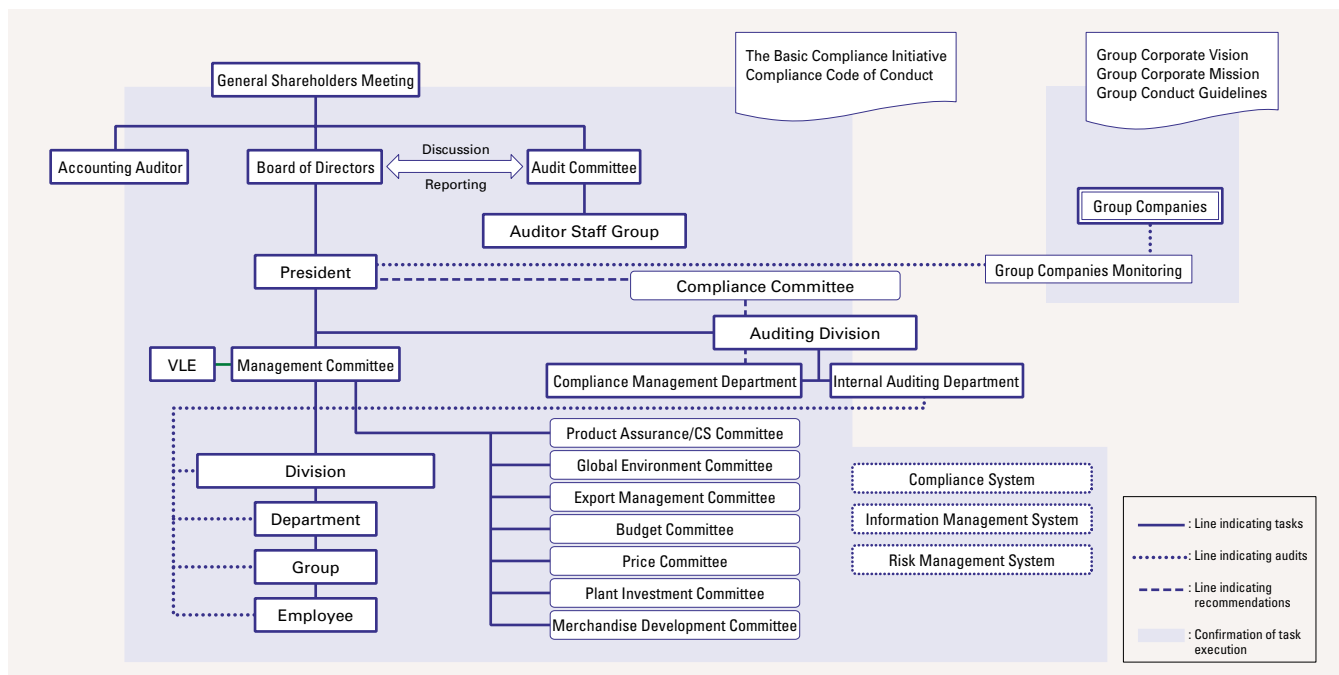
As a function of monitoring our management, we have an auditing system (five auditors, of which three are external). Besides attending the board of directors meetings and other important meetings, the auditors consider business reports from directors, review important decision documents, investigate the business and assets status of head office and other key business sites, request business reports from affiliate companies when necessary and conduct auditing activities.

In addition, as an internal auditing function, an Internal Audit Department has been created so that regulatory compliance, reliability of financial reports and effectiveness/efficiency of work can be improved through the promotion and support of internal audits.

## Risk Management

Smooth corporate management as well as integrity and stability are strived for, based on Risk Management Rules that stipulate assurance of the general management system to identify the factors inhibiting the performance of corporate tasks and the danger of losses related to corporate tasks as risks, to understand precisely the status of the risks, and to implement any necessary actions against risks.

Chart of Corporate Governance Structure



# Efforts toward Compliance

Isuzu regards compliance as of crucial importance in order to raise corporate values, based on our corporate vision. We have thus developed and have been implementing our Basic Compliance Initiative.

## The Basic Compliance Initiative

Our corporate vision is: *Isuzu will always mean the best: A leader in transportation, commercial vehicles and diesel engines, supporting our customers and respecting the environment.*

In order to maintain high corporate values and fulfill this vision, it is absolutely crucial to maintain a high work ethic, not only to ensure compliance, but also for all of our executives and employees to conduct themselves in accordance with the highest values, so that we engender trust from society.

With absolute compliance as our highest management priority, we have created Basic Compliance Initiative for both internal and external purpose. Our management assumes responsibility for leadership of this initiative. Should any violations occur, management is committed to resolving these issues and investigating their causes, in order to ensure that they do not recur. Management is also responsible for providing prompt and appropriate public disclosure and accountability.

### 1. Gaining Customers' Trust

We will gain our customers' trust by providing socially valuable products and services that enrich their lives.

### 2. Fair and Sound Activities

We will conduct business in the spirit of free and fair competition. Further, as private citizens committed to a healthy and fair relationship with host governments, we resolve to avoid contact with any anti-social groups or organizations.

### 3. Disclosure of Corporate Information

We will disclose corporate information to both shareholders and the public in a timely, appropriate and fair manner.

### 4. Respecting Employees

We will provide a safe, comfortable working environment, with respect for employees' individuality, so that they can make the most of their abilities.

### 5. Protecting the Environment

As global citizens, we will work to protect the environment through our business activities, while also actively promoting community and regional environmental protection.

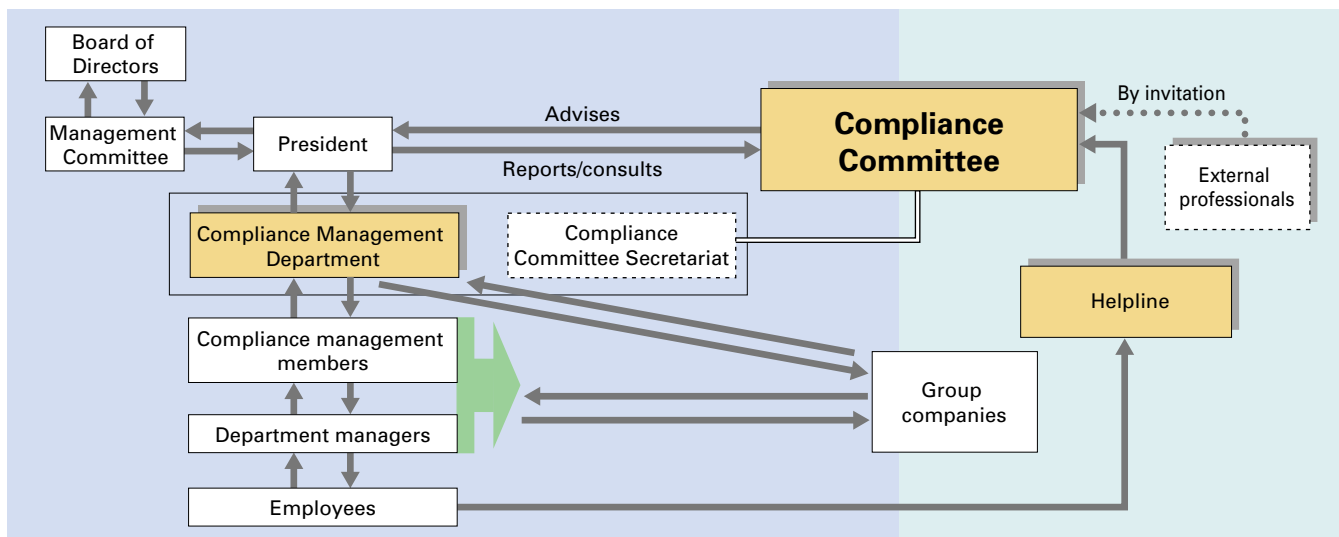
### 6. Contributing to Society

As good corporate citizens, we will make a positive contribution to society.

### 7. Living in Harmony with the Global and Local Communities

We will respect the culture and customs of different countries and regions and work to contribute to the development of these areas through our business activities.

## Isuzu's Compliance Structure



## Activities

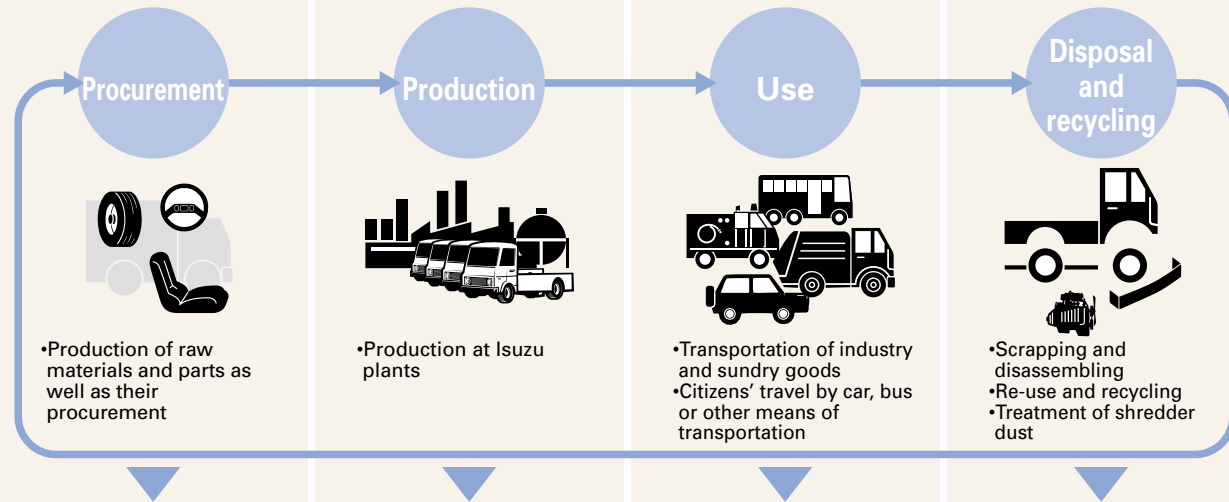
Isuzu Motors Limited promotes compliance activities with other group companies to enhance the corporate value of the group as a whole. Procedures for new automobile registration and periodical automobile inspection were unified across all domestic dealers and

these procedures were implemented as from November 2006. Through these activities, thorough compliance in conducting the said tasks as well as deployment of compliance activities have been ensured on a nation-wide basis, across all domestic dealers.

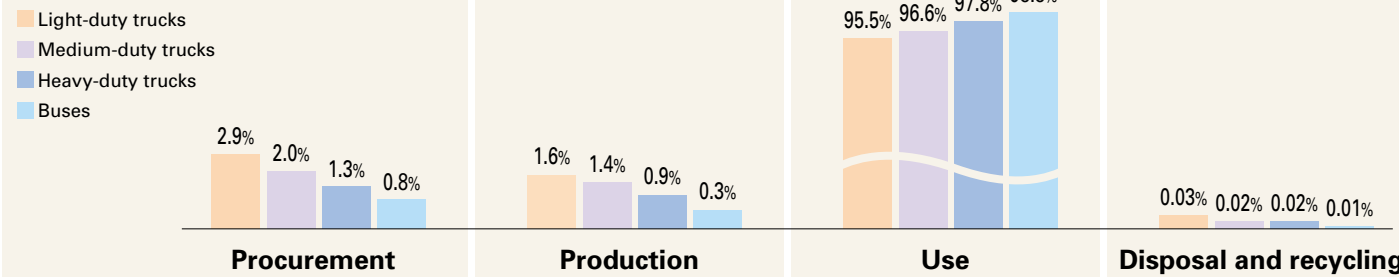
# Overview of Isuzu's Environmental Activities, Efforts to Reduce Environmental Impact, and Environmental Accounting

Based on our assessment of the environmental impact of a vehicle's life cycle, from materials procurement to recycling and disposal, we are striving to reduce our environmental impact, with priority on the areas where it is greater.

## Life Cycle of Isuzu Products



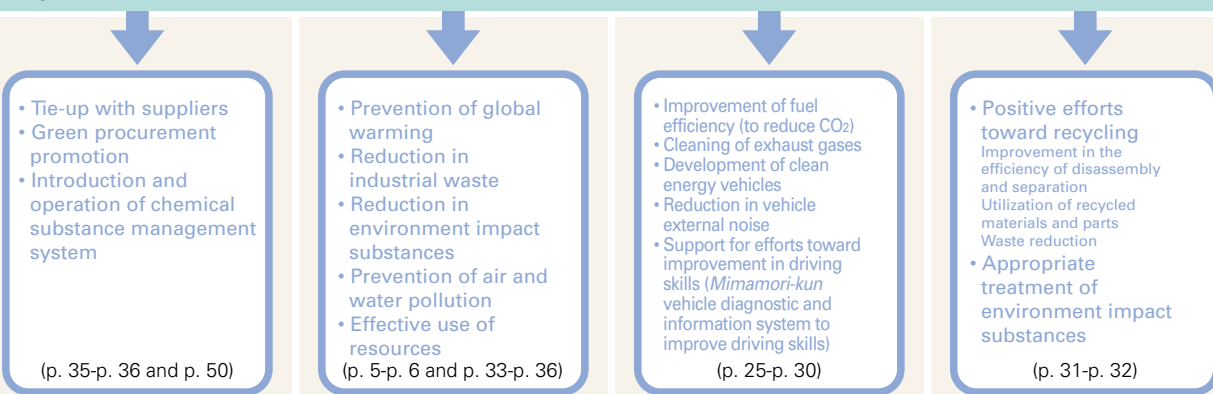
### Ratio of CO<sub>2</sub> emissions



### Major factors responsible for environmental impact



## Isuzu's Major Initiatives



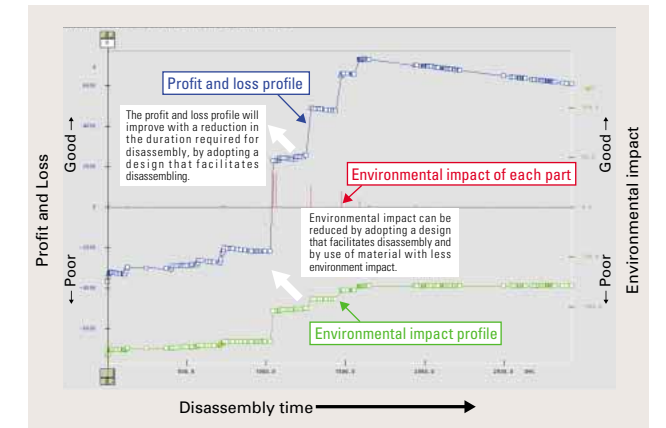
## Environmental Impact per Vehicle and Isuzu's Efforts for Reduction

Isuzu is addressing environmental issues, based on a study of the Life Cycle Assessment (LCA) method. The environmental impact in a vehicle's service period (life cycle) mostly occurs during its use. CO<sub>2</sub> and exhaust emissions such as PM and NO<sub>x</sub> are the main causes of such environmental impact. Because of this, Isuzu is stepping up its efforts to improve fuel efficiency, that is, reduction of CO<sub>2</sub> and decrease in exhaust gases, by using "soft" and "hard" tools. On the hardware side, we are focused on the development of fuel-efficient and clean engines and vehicles (see p. 25-p. 28). On the software side, we are trying to educate our customers on fuel-efficient driving skills (see p. 29-p. 30).

Also, as a positive effort towards improving recycling, an effort is being made towards the efficiency of disassembly and separation based on DFE\* (Design For Environment). The following graph indicates an analysis example, where improvements in the efficiency of profit and

loss (disassembly efficiency) and environmental impact are being strived for by adopting an optimal disassembly process (disassembly order).

Examples of DFE-based Vehicle Assessment (Disassembly of a Light-duty Truck)



\* DFE: Design For Environment

## Environmental Accounting

### Fiscal 2006 environmental accounting

Environmental accounting, aimed at assessing environmental costs and their effects, is an important means for promoting environmental protection and business activities continuously and efficiently. To this end, Isuzu utilizes an environmental accounting system for management decisions. Environmental accounting is disclosed to its customers and stakeholders in its Environmental Report. We plan to upgrade the disclosure by improving the accuracy of information and expanding the scope of cost-effectiveness analysis.

### Environmental protection costs

In fiscal 2006, the total amount of investment in and cost for environmental protection amounted to ¥36.3 billion (of this, ¥34.3 billion was spent on research and development into measures to meet emission regulations, both domestic and overseas). These figures were tallied in accordance with the guidelines of the Ministry of the Environment. Combined costs, including non-environmental protection costs, were totaled with a proportional calculation.

### Effects of environmental protection

Through research and development, we were able to improve product performance (refer to p. 23-p. 24 for environmental goals and achievements). At our plants, CO<sub>2</sub> emissions were reduced by full-scale operation of a cogeneration system and the introduction of a multi-can type combustor boiler, and the final landfill waste was reduced by recycling incinerator ash.

Environmental Protection Costs Target period: April 1, 2006 to March 31, 2007

(Unit: million yen [fractions rounded to nearest million])

Classification of environmental protection costs		Amount of investment	Costs	Details of major activities
1)	Environmental protection costs to curb environmental impact caused by main business activities: business-area cost	193	547	Modification/installation of a waste water treatment system, improvement in energy conservation (modification for heat insulation on the plant roof) and industrial waste treatment costs
	1. Costs for pollution prevention	92	164	
	2. Costs for environmental protection	100	43	
	3. Costs for resource circulation, costs for disposal of industrial waste (including landfill)	0	340	
2)	Environmental protection costs to curb environmental impact caused by major upstream and downstream business operations: Upstream and downstream costs	0	736	Costs for rebuilding engines and transmissions, operation/management costs for boilers and waste water treatment systems, etc.
3)	Environmental protection costs in management activities: Management activity costs	136	251	Costs for addressing the Recycling Law internally, costs related to ISO compliance, soil investigation, etc.
4)	Environmental protection costs in research and development: Research and development costs	5,428	28,835	Activities to reduce the environmental impact of products, measures to comply with domestic and overseas emissions regulations, such as post new long-term emissions regulations in Japan and Euro V
5)	Environmental protection costs in social activities: Social activity costs	0	56	Costs for recycling activities, support for social contributions and environmental protection activities, such as sending a delegation to the South Pole, etc.
6)	Costs to deal with environmental damage: Environmental damage recovery costs	12	90	Surcharge on pollution impact, legal costs, etc.
7)	Other environmental protection-related costs: Other costs	0	0	
<b>Total</b>		<b>5,769</b>	<b>30,516</b>	

### Effects of Environmental Protection

Effects of Cost Reductions	(Unit: million yen)
Cost reductions through energy conservation	77
Reduction in waste disposal costs	-4
Reduction in costs for tap water and water for industrial use	13
<b>Total</b>	<b>86</b>

### Effects of Quantitative Reduction

CO <sub>2</sub> emissions	4,500 t
Amount of landfill waste	53.5 t
Water usage	120,000 m <sup>3</sup>

# Efforts for Environmental Management

Led by its Global Environment Committee, Isuzu is promoting Consolidated Environmental Management to tackle global environmental problems group-wide.

## Efforts for Environmental Management

Recognizing environmental management as one of the most important management tasks, Isuzu is aggressively tackling environmental management centered on the Isuzu Global Environment Committee established in August 1990 and based on the Isuzu Charter on the Global Environment. Isuzu has an environmental management system to continuously reduce environmental impact caused by business activities and to strengthen its corporate structure in environmental management. To upgrade and expand such efforts globally, we launched Consolidated Environment Management activities in 2004, to reduce environmental impact by sharing the spirit of the Isuzu Charter on the Global Environment with group companies. As a first step, eight domestic and six overseas manufacturing companies of our group were certified as ISO 14001 compliant. Enhanced efforts towards environment management have been put in place by

arranging periodical meetings between group companies to discuss progress towards the achievement of environmental targets, such as the prevention of global warming.

Furthermore, our domestic sales companies have been implementing their activities, based on Isuzu's unique Environmental Measures Guidelines, since April 2005. Currently, most domestic dealer sites (33 dealers) have achieved their targets in the first phase and are now working toward higher levels of environmental preservation.

Isuzu's approach to the environment is being promoted as a coordinated effort with manufacturing plants, product development, material and parts purchasing functions and dealers. Isuzu is strongly committed to the reinforcement of environmental consolidation by group companies and implementation of environmental measures in each office.



### The Isuzu Charter on the Global Environment (established in May 1992)

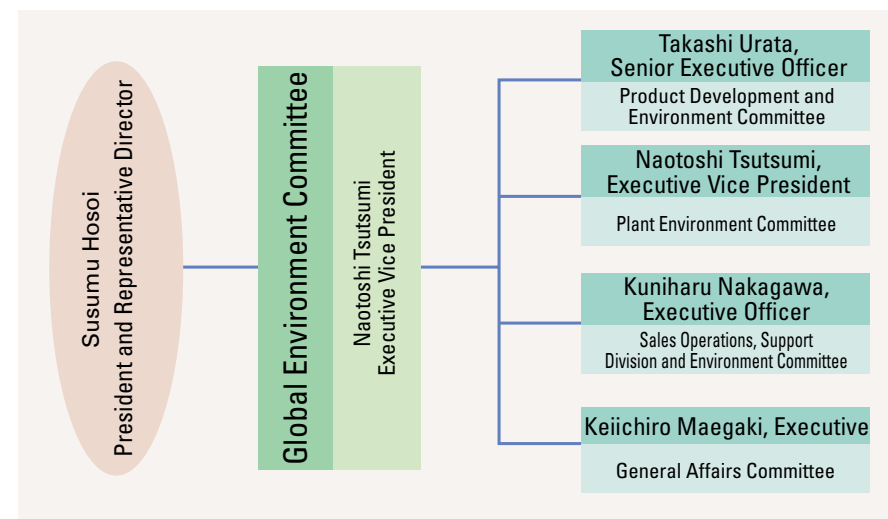
#### Policies in Coping with the Global Environment

1. Throughout the life of a vehicle, from production, to usage, to disposal, we will cope proactively with conservation of the environment.
2. In order to leave a beautiful earth to our descendants, not only through our business activities, but also as citizens of the earth, we will cope proactively with environmental conservation activities of localities and society.

#### Action Directives

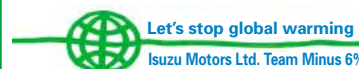
1. We will minimize consumption of energy and emissions during our vehicle production processes, thus conserving the environment.
2. With regard to the exhaust gas, noise, etc. that are generated in the process of using vehicles, we will reduce them throughout the development and production of vehicles. Also, we will develop rational logistics systems and thus conserve the environment.
3. Realizing that resources are finite, we will aim to provide vehicles that are loved by customers for a long time, and we will thoroughly consider recycling, in order to make our vehicles recyclable during the disposal process.

**Global Environment Committee** Isuzu is continuing company-wide environmental efforts, led by the Global Environment Committee.

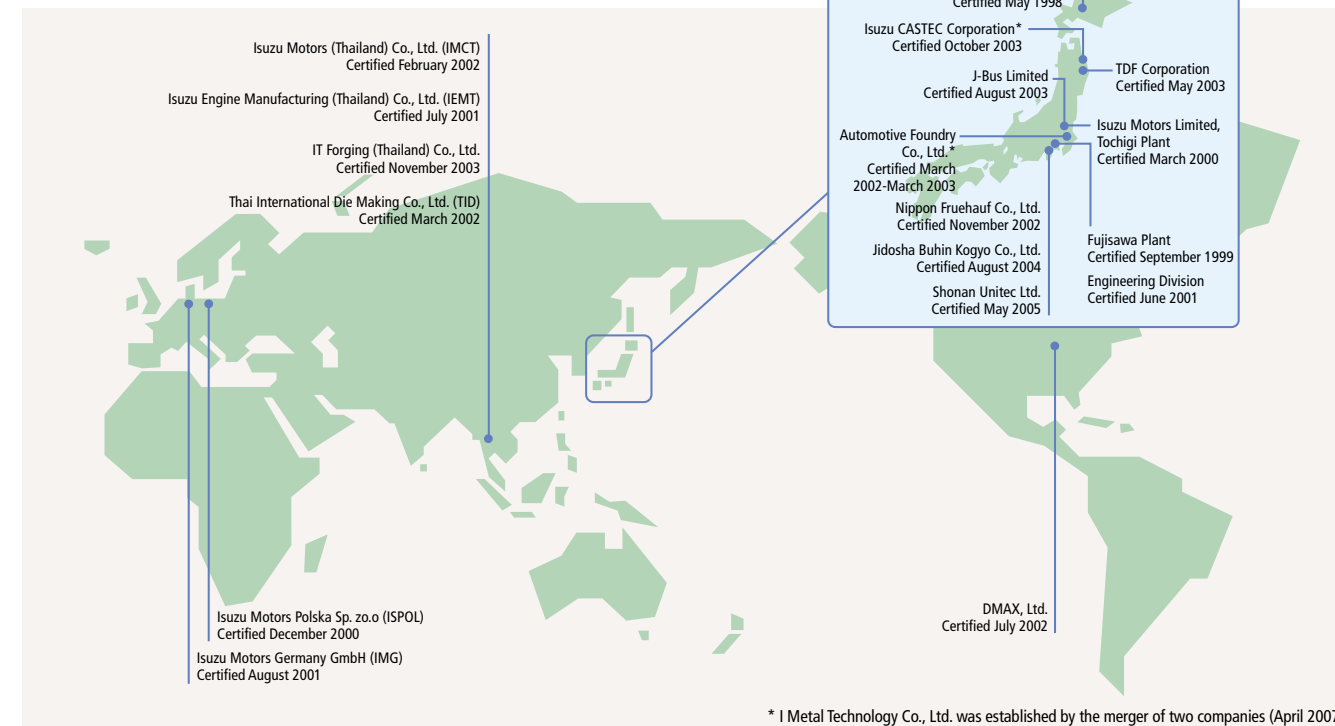


### Team Minus 6% Activities

Isuzu has been promoting Team Minus 6% Activities since June 2005. Besides Cool Biz (summer dress code)/Warm Biz (winter dress code), employees are actively involved in energy-saving activities in each family.



### ISO 14001-Certified Worksites



\* I Metal Technology Co., Ltd. was established by the merger of two companies (April 2007).

### Promoting Environmental Audits

Isuzu conducts annual environmental audits to ensure that the environmental management system has been properly deployed and that improvements have been made to this system where necessary. Through these audits, problems within our systems and performances are identified, and corrected continuously.

In fiscal 2006, audits for surveillance by a third party certification agency were conducted at all of our domestic plants (Fujisawa and Tochigi) and our product development division. There were five cases of minor non-conformity, which have been corrected. Furthermore, an intra-company mutual exchange of auditors from different sites has been implemented during internal audits, besides periodical training sessions to train internal auditors, to improve the quality of the internal audits by taking external viewpoints into account.



Internal auditor training session

### Complying with Environmental Laws and Regulations

At Isuzu, we are continuously promoting activities to reduce the environmental impact caused by our business operations. For this, we are committed to full compliance with government and municipal laws and regulations. We are also striving to reduce our environmental impact as much as possible, by setting up voluntary regulations that are stricter than those officially in force. At our worksites, Environmental Committee meetings are held regularly to evaluate compliance with environmental laws and regulations, plus related requirements, and we are also continuously improving the ISO 14001-based environmental management system. All legal requirements are currently being met.

### Recall of Environment-related Products and Legal Suits

There was one case of environment-related recall in fiscal 2006. We recalled the product listed below and the necessary corrective measures are being implemented.

Recall detail - GIGA heavy-duty truck: problems associated with noise in exhaust pipe

A decision was given at the first trial of the first Tokyo air pollution lawsuit of October 29, 2002 for the claim that health damage was caused by automobile emissions. Currently, consultations are being held to achieve an amicable settlement (as of July 2007).

# Efforts for Consolidated Environmental Management

Let us introduce how our group companies are working on consolidated environmental management, which has been progressively implemented since fiscal 2004.

## Efforts for Environmental Activities in Isuzu's Manufacturing Division

Isuzu has been promoting consolidated environmental management activities to create environmentally friendly plants by sharing the Isuzu Charter on the Global Environment with eight domestic and six overseas group companies. In fiscal 2007, three domestic group companies joined the activities in an attempt to expand the scope of environmental management (see p. 39). From fiscal 2008, we will expand the scope of these efforts to include more overseas group companies.

## Efforts for Consolidated Environmental Activities of Domestic Group Companies

Isuzu and its domestic group companies plan to reduce environmental impact by setting goals for the group for 2010, while maintaining their individuality and sound pace of progress. The group companies take turns in sponsoring plant environmental meetings on a regular basis, to improve the quality of their efforts through *litokodori* activities. In October 2006, the Award of the Minister of the Environment was achieved by the Isuzu Engine Manufacturing Hokkaido Corporation for industrial waste zero-emission activities (see p. 39).



Domestic consolidated group meeting



litokodori activities

## Efforts for Consolidated Environmental Activities of Overseas Group Companies

Isuzu and six overseas group companies held a second global plant environmental meeting in Japan in June 2007. They launched environmental efforts that reflect the regulatory circumstances of individual countries, including Thailand, the United States and European countries, by setting medium- and long-term goals, such as the prevention of global warming. In addition, the members toured the Fujisawa Plant, a main Isuzu plant, to observe the production process and environmental equipment as part of the information-sharing efforts.



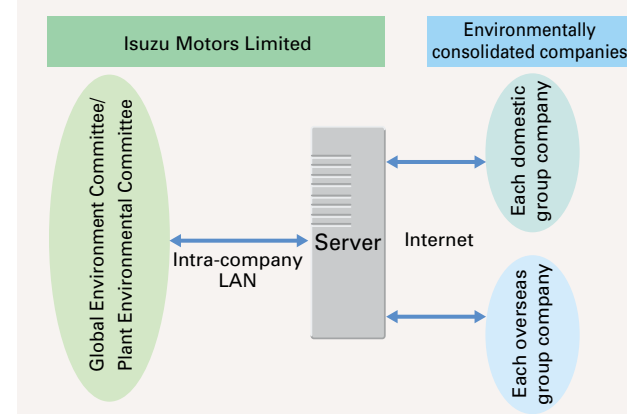
Consolidated Environmental Meetings of Overseas Group

## Environmental Information Collecting System

An Environmental Information Collecting System, based on the Internet, has been introduced to facilitate environment-related information exchange among group companies within the framework of consolidated environmental activities.

## Outline of the Environmental Information Collecting System

- Consolidation of a large amount of environmental data of various kinds
- A bulletin board system for information exchange
- Security of confidential information



## Efforts for Consolidated Environmental Activities by Domestic Dealers

Domestic dealers are deeply involved with the local community in each district in their daily business activities, acting as a contact point with customers in vehicle sales, maintenance and after-sales service. While Isuzu maintains a nation-wide network of dealers and field offices, it introduced Environmental Measures Guidelines<sup>1</sup> in April 2005 as a part of its environmental efforts to focus on the environmental preservation activities of each dealer that is closely connected to the local community and to promote activities at a field-office level.

In fiscal 2006, we conducted internal audits in all our offices to check on the progress of environmental activities, based on the Guidelines. As a result, 265 sites achieved the standard's first step and were approved for Isuzu Silver Eco-Dealer<sup>2</sup> certificates (as of March 2007). The Silver-certified sites will proceed to the second step and carry out additional environmental activities by working toward Gold Eco-Dealer certification as their next goal.

- 1 Isuzu Environmental Measures Guidelines: Isuzu's unique guidelines for environmental management that stipulate items to be strived for by dealers. The standard is classified into two stages and the activities to be conducted in each stage are determined in a step-wise manner, from Step 1 to Step 2 and so on.
- 2 Isuzu Eco-Dealer Certification System: A system to award certificates to sites that meet a certain minimum standard according to Isuzu Environmental Measures Guidelines. In this system, dealers who achieve the Step 1 standard are certified as Silver Eco-Dealers and those who achieve Step 2 are certified as Gold Eco-Dealers. As of March 2007, a total of 265 dealers have been certified as Silver Eco-Dealers (certification rate: 86%).



A scene from an audit



Silver Eco-Dealer Certificate

## Training of Environmental Management Members

ISO 14001 in-house auditor training sessions were held to train environment management members who play key roles in promoting environment-related activities at dealers' sites. A total of 62 trainees joined the training and all of them qualified as in-house environmental auditors. Training sessions are also planned in fiscal 2007 for the nurturing of environment management members.



In-house auditor training session

## Environmental Activities Undertaken by Dealers

After starting activities based on Isuzu Environmental Measures Guidelines, Yamagata Isuzu Motors Ltd. was nominated as an "Environmentally friendly automobile dealer/maintenance shop" by the Yamagata Transport Branch Office in November 2006. This award for "Environmentally friendly automobile dealer/maintenance shop" is given only to the dealers who pass stringent screening by a Transport Branch, where assessment is conducted on 31 items, including appropriate management of the manifest of end-of-use vehicles and industrial waste in daily business activities, appropriate storage of waste on the site, etc.



Commended members of Yamagata Isuzu Motors Ltd.: Mr. Chiba (President, front row center), Mr. Miura (Chief of Yamagata Office, front row left), Mr. Hiwatari (Assistant Chief of Sakata Office, front row right), Mr. Katagiri (Environmental Management Manager, rear row right), Mr. Yuki (Environment Management Member, rear row left).

# Environmental Goals and Achievements

Here is the report on the goals and achievements of our environmental activities.

## Manufacturing Environmentally Friendly Products

FY2006 Environmental Goals	FY2006 Achievements	Self-evaluation	FY2007 Goals	Mid- and Long-term Goals	Related pages
Improvement in fuel efficiency to prevent global warming • Continuous development of products with improved fuel efficiency	Achieved the 2015 fuel efficiency standard (some models excepted) • Light-duty trucks ELF (Released in December 2006) • Medium-duty trucks FORWARD (Released in May 2007) • Heavy-duty trucks GIGA (Released in March 2007) • Heavy-duty sightseeing bus GALA (Released in July 2006) • Heavy-duty route bus ERGA (Released in February 2007)	○	• Continuous development of products with improved fuel efficiency	• Achievement of maximum fuel efficiency	p. 7-p. 10, p. 25-p. 27
Cleaner emissions • Advanced launch of low-emission vehicles	Isuzu obtained certification for low-emission vehicles that achieved a 10% reduction in both NOx and PM, or a 10% reduction in PM versus new long-term emissions regulations. • Light-duty trucks ELF (Released in December 2006) • Medium-duty trucks FORWARD (Released in May 2007) • Heavy-duty trucks GIGA (Released in March 2007) • Heavy-duty sightseeing bus GALA (Released in July 2006) • Heavy-duty route bus ERGA (Released in February 2007)	○	• Advanced market introduction of low-emission vehicles	• Development of next-generation after-treatment devices	p. 7-p. 10, p. 25-p. 27
Reduction in vehicle external noise • Development of technology for vehicle external noise reduction and its deployment in vehicles	• Reduction of idling noise of light-duty trucks ELF by 2 dB versus conventional models (Released in December 2006) • Reduction of idling noise of medium-duty trucks FORWARD by 0.5 dB (4HK1 type) and 1 dB (6HK1 type) versus conventional models (Released in May 2007)	○	• Development and commercial application of technology to curb noise	• Development of low-noise diesel-powered vehicles	p. 28
Development and promotion of clean-energy vehicles • Development of new technology for marketing such vehicles	• Since the first registration in 1993 as minister-certified vehicles, registration of the ELF CNG reached 10,000 units in April 2007. In FY2006, the ELF CNG captured an outstanding 79% share (based on our data) of the CNG light-duty truck market.	○	Planning to achieve a 2015 fuel efficiency standard • Light-duty trucks ELF HYBRID Planning to obtain certification for low-emission vehicles, based on new long-term emissions regulations • Light-duty trucks ELF CNG • Light-duty trucks ELF HYBRID • Medium-duty trucks FORWARD CNG • Heavy-duty route buses ERGA CNG • Medium-duty route buses ERGA MIO CNG	• Research and development of alternative-fuel and electric vehicles with superior environmental performance	p. 27
Promoting recycling • Achieved compliance with the standards required by the domestic automobile recycling law • Established the EU's free-of-charge end-of-life vehicle recovery system and started operating it smoothly • Expanded the use of recycled materials	• Complied with the 2006 automobile recycling law: Achieved a 72.6% ASR recycling rate (a standard rate of 30% or more) and a 94.2% air bag recycling rate (a standard rate of 85% or more) • Constructed the EU's end-of-life vehicle recovery system • Deployed recycled material in the center console box (approved for an Eco Mark)—an interior plastic component of the heavy-duty GIGA truck (November 2006)	○	• Complied with the automobile recycling law • Improved the EU's free-of-charge end-of-life vehicle recovery system • Increased the use of recycled materials	• Achievement of a 95% actual recycling rate or more of used vehicles by 2015	p. 28, p. 31-p. 32
Reduction in environmental impact substances • Reduction in the usage of lead, mercury, cadmium and hexavalent chromium	• Achieved a reduction in the use of lead to 1/10 or less of the 1996 level (ELF), (achieved a reduction of 1/4 or less for heavy-duty commercial vehicles) • Completely eliminated the use of mercury, except in some limited parts (minimal quantities are used on the liquid crystal display in the discharge headlamp and navigation system) • Completely eliminated the use of cadmium (for new models released in January 2007 and subsequent years) • Completed the switch from hexavalent chromium to an alternative material, except in some limited parts	○	• Efforts to reduce the use of lead, mercury, cadmium and hexavalent chromium • A reduction in the use of lead to 1/10 or less, of the 1996 level in 2006 and subsequent years (to 1/4 or less for heavy-duty commercial vehicles) • Termination of the use of mercury from January 2005 and cadmium from January 2007	• Reduction in the use of lead, mercury, cadmium and hexavalent chromium • Ban on the use of hexavalent chromium from January 2008 onward	p. 28
Reduction in air conditioner refrigerant • Compliance with Japan Automobile Manufacturers Association's voluntary restraints: Reduction in the usage of air conditioner refrigerant by 20% by 2010, from the 1995 level	• Complied with Japan Automobile Manufacturers Association's voluntary restraints: Achieved a 44% reduction in the amount of refrigerant per vehicle in FY2005.	○	• To keep the reduction of refrigerant for the refrigerant system at the current top level in this fiscal year, too	• Switchover to fluorocarbon-free air conditioners	p. 28
Efforts to decrease VOC in vehicle cabins • Development of low VOC vehicles	• Light-duty trucks ELF (released in December 2006) complied with the guidelines of the Ministry of Health, Labor and Welfare • Medium-duty trucks FORWARD (released in May 2007) complied with the guidelines of the Ministry of Health, Labor and Welfare • Heavy-duty route buses ERGA (released in February 2007) complied with the guidelines of the Ministry of Health, Labor and Welfare in combined use with ventilation fans	○	• Development of low VOC vehicles	• Increase in the number of low VOC vehicles	p. 28

\*VOC (Volatile organic compounds such as formaldehyde and toluene)

## Building Environmentally Friendly Plants

FY2006 Environmental Goals	FY2006 Achievements	Self-evaluation	FY2007 Goals	Mid- and Long-term Goals	Related pages
Prevention of global warming by reduction in CO2 emissions • CO2 emissions: 188,300 tons or less • Improvement in energy efficiency by reduction in energy consumption by 1% or more per unit per year	• CO2 emissions: Target achieved with actual emissions of 185,749 tons, down 2.4% on the previous year • Basic unit for energy: Target achieved with actual reduction of 9.8%, more than the planned 1% reduction	○	• CO2 emissions: 184,129 tons or less • Basic unit for energy: Reduced by 1% or more per year	• CO2 emissions reduction targets Isuzu Motors Ltd.: Reduction by 50% or more from the FY1990 level by FY2010 Isuzu domestic group companies: Reduction by 6% per unit from the FY2004 level by FY2010 • Formulation of a medium-/long-term plan for global CO2 reduction	p. 34, p. 39
Reduction in waste • Strengthening of zero emission measures • Landfill waste: One ton or less per plant per month and 24 tons or less per year	• Actual: 12.5 tons per year (including incinerator ash) • Achieved target of one ton (including incinerator ash) per plant per month and 24 tons or less per year	○	• Landfill waste (only Isuzu Motors): One ton or less per plant per month and 24 tons or less per year	• Landfill waste (only Isuzu Motors): To maintain one ton or less per plant per month and 24 tons or less per year by FY2010 • Landfill waste (domestic group companies): Decrease by 50% from the FY2004 level by FY2010	p. 35, p. 39
Control and reduction of environmental impact substances • Reduction in VOC emissions in the painting process to 19.2 g/m <sup>2</sup> or less (voluntary target)	• VOC emissions in the painting process: Target achieved with actual emission of 19.1 g/m <sup>2</sup> versus planned 19.2 g/m <sup>2</sup>	○	• VOC emissions in the painting process to 20.7 g/m <sup>2</sup> or less	• VOC emissions in the painting process: 19.2 g/m <sup>2</sup> or less by FY2010 • Reduction in PRTR substances emissions Domestic group companies: Decrease by 30% from the FY2003 level by FY2010	p. 36, p. 39
Logistics • Identification of transport energy complied with the revised Energy Conservation Law • Formulation of a 1% reduction plan for FY2007	• Identification of transport energy complied with the revised Energy Conservation Law: Report to the regulatory body • Simulation of the energy-saving impact through logistics rationalization in FY2006: 3.7% reduction	○	• Transport energy use: Decrease by 1% over the previous year	• Transport energy use: Decrease by 4% from the FY2004 level by FY2010	p. 41-p. 42

## Environmental Management

FY2006 Environmental Goals	FY2006 Achievements	Self-evaluation	FY2007 Goals	Mid- and Long-term Goals	Related pages
Environmental management • Promotion of environmental efforts consolidation with domestic and overseas manufacturers and dealers	• Manufacturing sites: All domestic and overseas environmentally consolidated manufacturing sites were certified with ISO 14001 and renewals continued • Dealers: 86% of the sites achieved Step 1 of the guidelines (as at the end of March 2007)	○	• Expansion in the consolidation of environmental efforts of all domestic and overseas environmentally consolidated manufacturing sites (three companies) • Promotion of the consolidation of environmental efforts by dealers and advancing to the next step	• To promote Isuzu group's consolidated environmental management • To achieve the group's long-term goals	p. 19-p. 22
Green procurement promotion • Promotion of green procurement of materials and parts • Promotion of ISO 14001 certification among suppliers (a certification rate of 81.6% or more)	• Continued sponsoring of explanatory meetings on procurement guideline (promotion of introducing an environmental management system, request for green procurement, request for establishing IMDS) • Percentage obtaining certification: 78.9% (an improvement of 0.6% over the previous year)	△	• To promote green procurement of materials and parts • To promote the introduction of the environmental management system at suppliers • 84.2% or more in FY2007	• To promote a reduction in the use of environmental impact substances • To implement the environmental management system in more suppliers	p. 50

## Social Report

FY2006 Environmental Goals	FY2006 Achievements	Self-evaluation	FY2007 Goals	Mid- and Long-term Goals	Related pages
Promotion of social contribution activities and environmental communication • Publication of environmental and social reports in Japanese in September 2006 and in English in December 2006. • Participation in events and exhibitions • Social contribution activities	• Published environmental and social reports in Japanese in September 2006 and in English in December 2006 • Participated in events such as Eco-Products 2006, Eco-car World, and the Fujisawa Environmental Fair • MCPC Award 2007 Grand Prix and the Prize of the Minister for Internal Affairs and Communications were awarded to <i>Mimamori-kun</i> • Dispatched engineer to National Antarctic research expedition for technological cooperation, cleaned the areas near the plants, and dispatched environmental education instructor • Implemented various events and public relations activities, including fuel-saving seminars and driving-safety classes by coordinating efforts with domestic and overseas dealers	○	• To issue environmental and social reports • To participate in events and exhibitions • To promote activities for social contribution	• To promote social contribution activities and environmental communication	p. 29-p. 30, p. 45-p. 49

The "○" mark represents the achievement of the goals in self-evaluation.  
The "△" mark represents the need for continued efforts.

# Manufacturing Environmentally Friendly Products

For the benefit of society, Isuzu is committed to creating a new value that makes it possible to balance curbing environmental impact with safety and economy.

## See Technology

In pursuit of customers' trust is the engineering philosophy of Isuzu. The company aims to manufacture products that earn the trust of all customers and stakeholders. Based on this philosophy, Isuzu seeks to advance technology in three areas—safety, economy, and the environment. Our action is guided by the basic development concept called "See" technology. The "S" stands for safety, the first "e" for the economy and the second "e" for environment.

Led by the engineering philosophy and the basic concept, we develop technologies and create a new value for society that harmonizes our efforts to curb environmental impact with safety and economy.



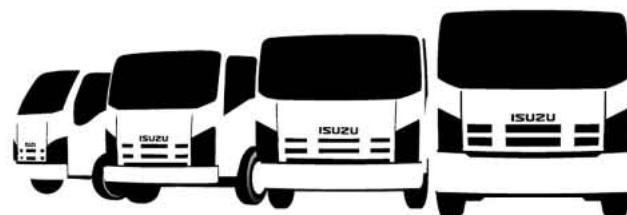
## Eight Major Tasks

With the following eight priority tasks in engineering environmentally friendly vehicles, we are developing various technologies to minimize environmental impact throughout the life cycle of vehicles.

- Prevention of global warming
  - Restrictions on resource exhaustion
  - Prevention of air pollution
  - Quiet environment
  - Safe environment
  - Comfortable vehicle cabins
1. To improve fuel efficiency and reduce CO<sub>2</sub> emissions
  2. To make exhaust gases cleaner
  3. To develop clean-energy vehicles
  4. To reduce vehicle external noise
  5. To reduce environmental impact substances
  6. To improve recyclability
  7. To reduce air conditioner refrigerants
  8. To reduce VOC in vehicle cabins

## Realization of the Basic Concept

Light-duty ELF and Medium-duty FORWARD Vehicles



In developing the new light-duty ELF and medium-duty FORWARD models, light-duty and medium-duty trucks were considered as one group, on the basis of the concept of See Technology. We have done complete model changes to these trucks to create internationally-popular trucks and to achieve global deployment of the project concept "SEE GLOBAL", where safety, economy and environmental performance are targeted from a global point of view.

In addition to compliance with the regulatory requirements of various countries, many country-specific conditions were taken into consideration in the development phase of this project to improve safety, economy and environmental performance. To meet all the requirements, an enormous number of design reviews were performed and numerous tests and simulations were repeated to attain the targeted performance. To become a leading company in the commercial vehicle and diesel engine industries, Isuzu has consolidated all of its accumulated knowledge and engineering power to address various country-specific requirements. As a consequence, we are developing trucks that satisfy requests from global customers by introducing system designs such as our module design.

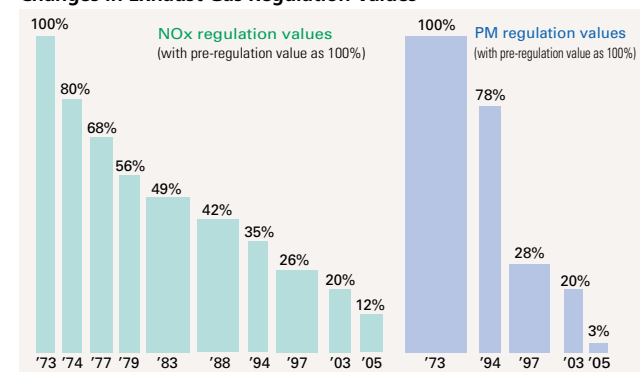


Fluid analysis simulation

## I-CAS (ISUZU Clean Air Solutions)

I-CAS is Isuzu's next-generation clean technology that has incorporated the most advanced technologies to meet the various environmental requirements for trucks. It combines Isuzu's three key next-generation technologies—optimal combustion technology, after-treatment technology for exhaust gases, and electronic control technology—to reduce environmental impact from the overall aspect of the vehicle.

Changes in Exhaust Gas Regulation Values



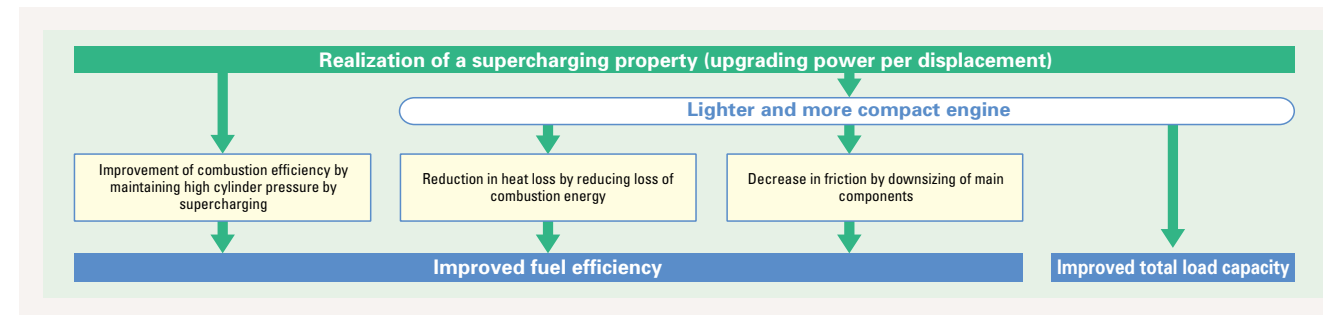
## D-CORE

D-CORE is the name of the next-generation diesel engine series, accommodating Isuzu's original concept, technology and performance, where small displacement and supercharged diesel engines are presented as the core\* technologies of future diesel engines. Downsizing through smaller displacement reduces the friction loss of each mechanism, and also improves fuel efficiency and reduces CO<sub>2</sub> emissions through weight reduction. Furthermore, a reduction in mechanical noise means quieter engines.

In a supercharged system, exhaust gas energy is collected to compress intake energy so that large quantities of air are supplied to the combustion chamber. By efficient use of this high amount of energy to ensure high engine torque and output, a further cleanup of exhaust gases, low fuel costs and a reduction in CO<sub>2</sub> emissions could be achieved.

\*Core: A main, important part.

### D-CORE Achieved both Environmental Performance and Economic Performance



## D-CORE Series

### 4JJ1-TCS

The 4JJ1-TCS engine that has been integrated in the light-duty ELF truck achieves both revolutionary environmental performance through conformance to the new long-term emissions regulations and low-emission truck certification, as well as conformance to the 2015 fuel efficiency standard. The engine offers power and torque that are far beyond the capabilities of conventional three-liter engines.



### 4HK1-TC

The 4HK1-TC engine that has been integrated in the medium-duty FORWARD truck achieves both revolutionary environmental performance through conformance to the new long-term emissions regulations and low-emission truck certification, as well as conformance to the 2015 fuel efficiency standard.



### 6UZ1-TCS

The 6UZ1-TCS engine that has been integrated in the heavy-duty GIGA truck achieves both revolutionary environmental performance through conformance to the new long-term emissions regulations and low-emission truck certification, as well as conformance to 2015 fuel efficiency standard. The efficient use of combustion energy minimizes energy loss and improves fuel efficiency. By making the engine more compact, weight is reduced and the maximum load capacity is maximized.



### ■ Heavy-duty Truck GIGA

The heavy-duty GIGA truck integrates the 6UZ1-TCS engine, a flagship model in the D-CORE Series, while conforming to the new long-term emissions regulations in all vehicles utilizing I-CAS technology.



### ■ Heavy-duty Route Bus ERGA

The heavy-duty ERGA route bus integrates the 6HK1-TCC engine in the D-CORE Series while conforming to both the new long-term emissions regulations and the requirements of the low-emission truck certification.



### ■ D-MAX

The D-MAX pickup truck integrates either the 2.5-liter 4JK1-TC or the 3-liter 4JJ1-TC engine in the D-CORE Series and satisfies the requirements of EURO 4, the stringent European emission regulations.



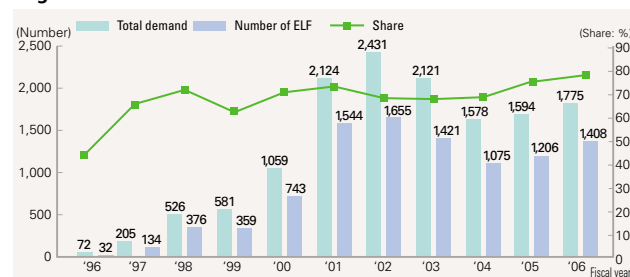
### ■ Development of an Eco-car

While Isuzu's primary policy is to make exhaust gases from diesel engines cleaner with excellent combustion efficiency, we are also actively developing low-pollution trucks such as the CNG and hybrid vehicles to enable further reductions in CO<sub>2</sub> and air pollution substances, as well as to ensure energy security.

### Development of CNG Vehicles

CNG vehicles run on natural gas. They have distinct advantages over diesel vehicles in terms of exhaust emissions such as NO<sub>x</sub> and PM, which seriously affect air pollution in urban areas. With lower CO<sub>2</sub> emissions, CNG vehicles are promising as low-pollution, alternative energy vehicles. Registration of the ELF CNG reached 10,000 units in April 2007.

Registered ELF CNG Vehicles



### Development of Diesel Hybrid Vehicles

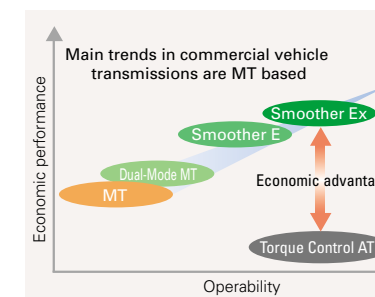
Isuzu's ELF Diesel HYBRID has achieved low CO<sub>2</sub> emission and low fuel costs by efficiently using the deceleration energy of the vehicle.



### ■ Smoother

"Smoother" is Isuzu's unique easy-driving system that enables computer-controlled automatic gear shifting and sequential manual gear shifting functions. A high-efficiency transmission is achieved by adopting fluid coupling with a lockup clutch and wet-type multi-disk clutch. Powerful driving performance and excellent fuel efficiency are realized by the optimal lockup control.

The light-duty ELF truck integrates Smoother Ex and the FORWARD medium-duty truck integrates Smoother Fx.

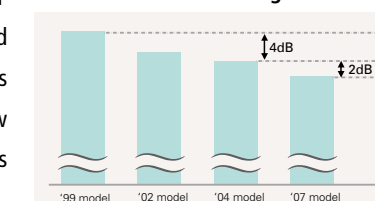


### ■ Reduction in Vehicle External Noise

Isuzu is working not only to comply with the world's most stringent noise regulations, but also to reduce idling noise and to improve the unpleasant tone of diesel engine noise. Major efforts have focused on reducing engine and drivetrain noise, studying an optimal sound insulation structure by analysis of noise and its transmission route, and research and development of high-performance sound-absorbing materials.

Idling noise in the ELF light-duty truck, released in December 2006, was reduced to 2 dB below that of the previous model.

Transition of the ELF idling noise



### ■ Improvement in Recyclability

Isuzu is making various efforts at each stage in a vehicle's life cycle, to reduce environmental impact. Consideration is given to the reduction of waste at the design stage. The company is also working to find ways of using recycled material. It has developed a console box, which comprises 52% recycled material, which has already been used in Isuzu's vehicles, from light-duty to heavy-duty trucks (see p. 31-p. 32).

### ■ Reduction in Environmental Impact Substances

We have prepared guidelines for regulating the use of four heavy metals, to comply with the EU-ELV (European Union End-of-Life Vehicles) directive and the Japan Automobile Manufacturers Association's voluntary restraints. Efforts to reduce environmental impact substances are underway, with mercury already banned, except where its use is permitted. To achieve these goals, we are switching from lead, cadmium and hexavalent chromium to alternative substances. The ELF, released in December 2006, achieved a reduction in the use of lead of 1/10 over the 1996 level.



Lead-free balance weight (above: 17.5 inch type/iron; below: 15.16 inch type/zinc)

Lead	Usage in and after 2006 will be reduced to 1/10 or less of 1996 levels (1/4 or less for heavy-duty commercial vehicles).
Hexavalent chromium	Use in new vehicles will be gradually banned from 2003 through 2008.
Cadmium	Use in new vehicles will be gradually banned from 2003 through 2007.
Mercury	Use in new vehicles was banned following the enforcement of the automobile recycling law in January 2005, except for use on some lighting fixtures and display equipment.

### ■ Reduction in Air Conditioner Refrigerants

Since the alternative refrigerant HFC134a is also a greenhouse gas, we set a target to cut its use by 20% below 1995 levels. The usage is now 44% lower than before. Also under development is an air conditioning system that uses CO<sub>2</sub> or other substances as a refrigerant.

### ■ Reduction in VOC in Vehicles

At Isuzu, we are taking measures to cut VOC<sup>1</sup> in vehicle cabins, in line with the Japan Automobile Manufacturers Association's policy for voluntary reduction efforts. There are a total of 13 hazardous substances designated by the Ministry of Health, Labor and Welfare.

Light-duty ELF trucks, medium-duty FORWARD trucks and heavy-duty ERGA<sup>2</sup> route buses complied with the guidelines of the Ministry of Health, Labour and Welfare.

<sup>1</sup> VOC: Volatile organic compounds such as formaldehyde and toluene  
<sup>2</sup> In combined use with a ventilation fan



# Mimamori-kun That Supports Fuel Saving and Safety Driving

Mimamori-kun online service that supports fuel saving and driving safety by allowing real-time access to driving status has evolved to a more sophisticated stage after a model change.

## Implementation of Full Model Change

Since its release in February 2004, the Mimamori-kun online service has been highly acclaimed as an advanced vehicle diagnostic and information system that supports fuel savings and driving safety by allowing real-time access to driving status.

Recently, we have implemented a full model change of this service and started sales as from May 31, 2007. This change has been implemented to enhance driving efficiency by reflecting various changes in transportation environments, including the drastic increase of fuel costs and revision of the Energy Conservation Law.

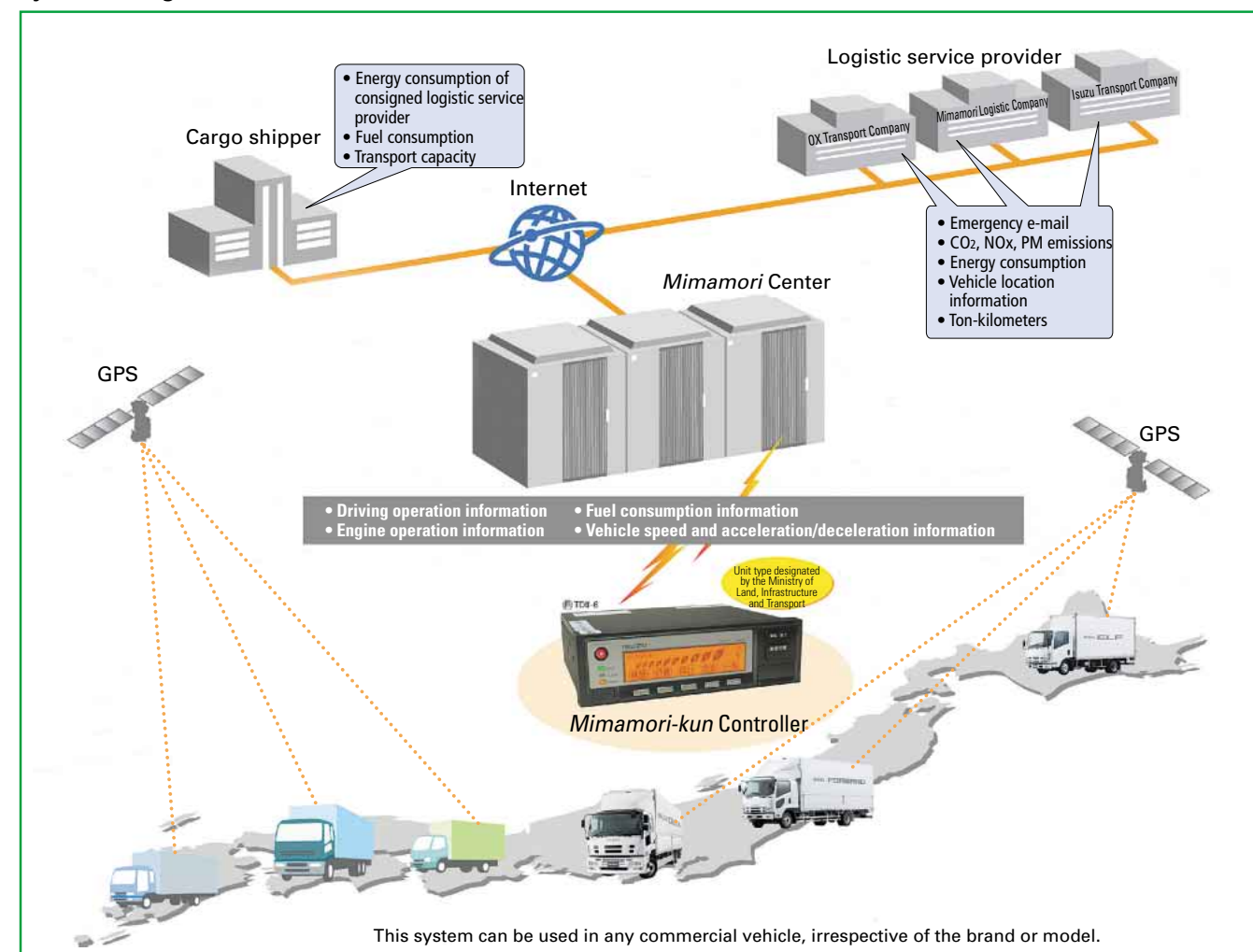
## Main Emphasis of the Model Change

The main emphasis of the current model change is the adoption of the Mimamori-kun Controller, a new type on-board unit certified

for designation by the Ministry of Land, Infrastructure and Transport. This new controller consolidates the communication function and the function of the digital tacograph (a so-called digi-taco), which was separately certified by the Ministry for designation. A high-speed data communication module developed by KDDI is integrated into the controller as a communication function. Thanks to this development, the first digital tacograph in the domestic market without a memory card was created. In addition to elimination of the costs due to loss or damage of the memory card, this mechanism allows driving analysis during long-distance driving, without recalling the vehicle to a base site.

Besides improved ease of operation, real-time communication of the driving status to drivers is available through voice guidance and a liquid crystal screen, which are new to the controller. These new features take fuel saving and driving safety to a new level.

## System Configuration of Mimamori-kun Online Service



## Versatile Service Menu

The new Mimamori-kun online service features the following functions:

- Message transmission  
Messages can be sent to an on-board LC screen from a PC at the base site. For safety purposes, the received messages cannot be displayed during driving.
- Notice of maintenance timing  
The system automatically determines the replacement timing of ten vehicle components including oil, tires and the air cleaner. This information is displayed on the on-board LC screen and the PC screen at the base site.
- Theft alarm  
In the event that a predetermined password is not entered by the driver, the system notifies the administrator. When the driver does not enter his/her password upon inserting the key, the system will report the risk of theft by displaying a message on the PC screen at the base site.

## MCPC Award 2007 Grand Prix and Prize of the Minister for Internal Affairs and Communications

The Prime Minister's Prize was awarded to the Mimamori-kun online service at the MCPC Awards 2007, following the Award of the Minister of Land, Infrastructure and Transport at the second Eco Products Award (awarded for the previous version). An MCPC Award is an award given to companies and organizations across industries that help promote mobile computing by constructing an advanced system and generating significant results. While being awarded the fifth grand prix, Isuzu also received the new Prize of the Minister for Internal Affairs and Communications.



MCPC Award 2007 ceremony

## Efforts to Support Soft Aspects: Opening of Seminars

While developing and marketing vehicles that match contemporary needs, Isuzu sponsors seminars for fuel saving and driving safety to propose better ways to use excellent cars, so that the customers can enjoy the full performance range of our vehicles. Being supported by many years of experience, Isuzu's training course for fuel-saving driving was designated as part of the eco-drive training syllabus in fiscal 2007 by the Foundation for Promoting Personal Mobility and Ecological Transportation.

The contents of the seminar are enriched every year with the input of new analysis data obtained through Mimamori-kun and advice on fuel saving and safe driving.

Furthermore, we opened a facility called the Isuzu Premium Club at Fujisawa Plant in December 2006, which is dedicated to these seminars. We are determined to make further efforts to reduce customers' logistic costs and environmental impact, to improve the general transportation quality of trucks.



Training session at the Isuzu Premium Club

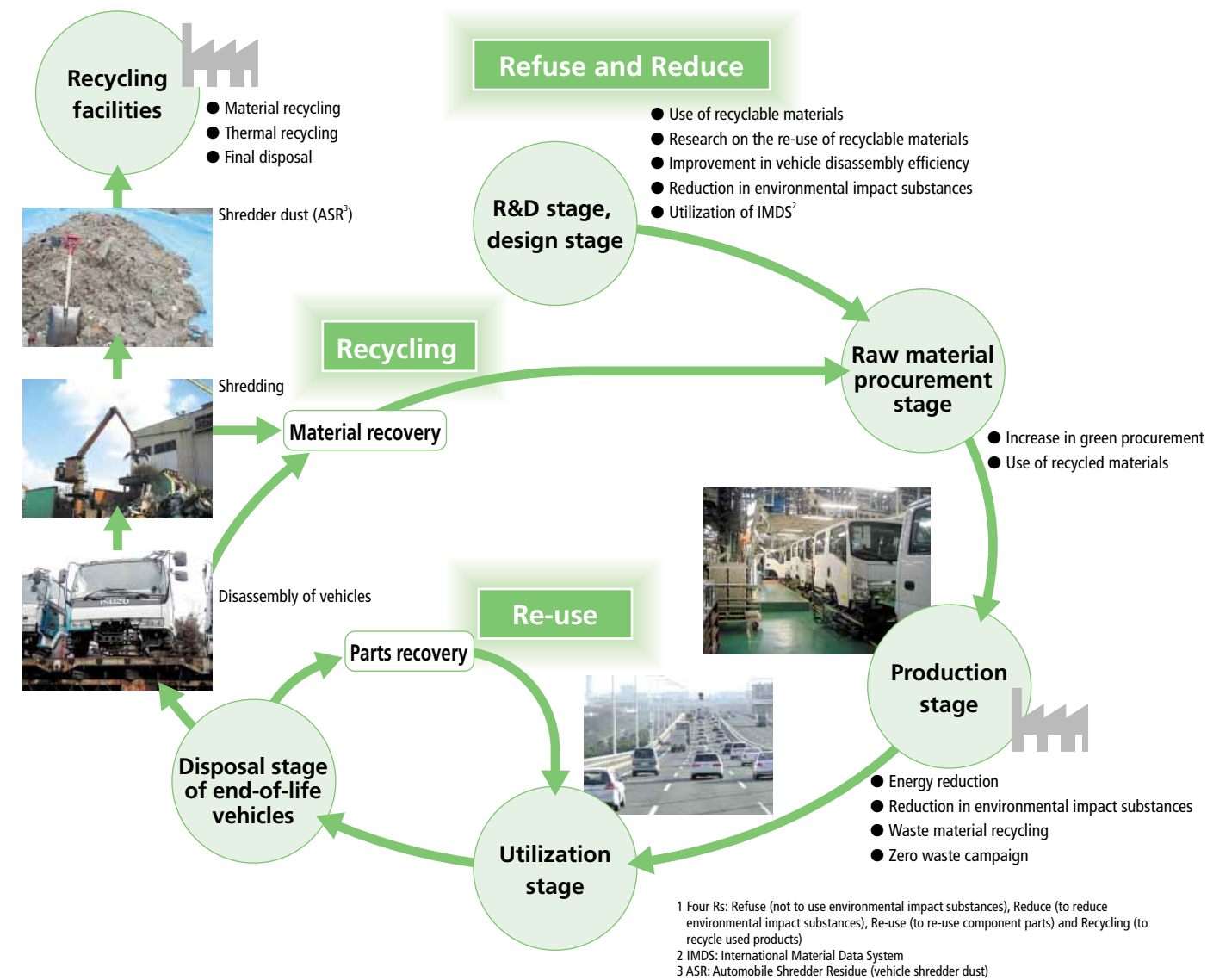


Outdoor training at the Isuzu Premium Club

# Approach to Recycling

To help create a recycling-oriented society, Isuzu Motors is committed to promoting recycling and reducing environmental impact substances by taking into account all stages of a vehicle's life cycle from research and development to disposal and practicing the four Rs<sup>1</sup> as much as possible.

## Overview of Recycling Efforts

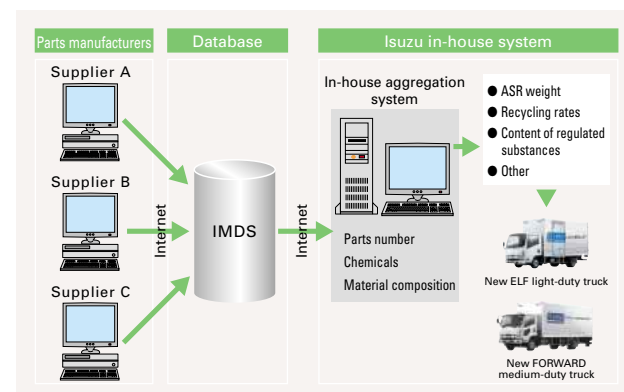


## Utilization of IMDS

IMDS refers to an international material data system aimed at collecting information (on material composition and chemicals) from parts' manufacturers. It is a new system designed for parts' manufacturers to efficiently provide information to automobile manufacturers via the Internet and for automobile manufacturers to calculate recycling rates of vehicles and collect information about the content of regulated substances.

In deciding on recycling charges for the new ELF light-duty truck and the new FORWARD medium-duty truck, we used IMDS to calculate shredder dust and improved calculation accuracy.

## Conceptual Diagram of IMDS



## Plastics Recycling Technology

Isuzu developed and used a center console box, interior equipment for trucks, partly made from plastic bumpers recovered from end-of-life vehicles. The product features a high content of products recovered from the market (52%) and the possibility of its reuse as a raw material after it is discarded. The center console box was certified with an Eco-mark by the Japan Environment Association. It was first introduced in the FORWARD medium-duty truck in May 2006, followed by the GIGA heavy-duty truck and the new ELF light-duty truck. We are currently contributing to the effective utilization of about 35 tons of waste plastic bumpers (about 11,600 pieces). Our efforts will continue to develop recycling technology aimed at making the most effective use of limited resources.



## Glass Recycling

Isuzu has started recycling glass in cooperation with automobile manufacturers, glass manufacturers and wreckers who are members of ART<sup>1</sup>. In fiscal 2006, it recovered about 130 tons of glass from end-of-life vehicles for cascade use in glass wool and horizontal recycling into glass for vehicles. Isuzu is continuing activities to realize the further recycling of glass from used vehicles by studying effective methods of glass transportation and collection through these demonstrative experiments.

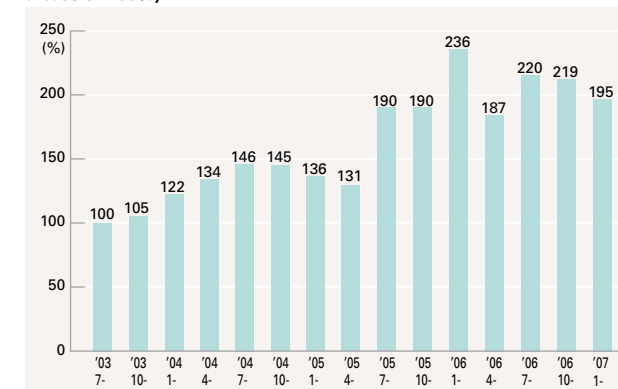


## Remanufacturing

We share information on re-manufactured parts with dealers by linking them to our in-house re-manufacturing network so that we can promote the re-use of parts from end-of life vehicles, meet the diversified needs of customers and realize prompt supply on their request.



Changes in the Shipments of Re-manufactured Parts, including Re-manufactured Engines (with the corresponding figures for the July to September 2003 period as a base of 100%)



## Complying with recycling-related laws, regulations and voluntary restraints

Isuzu joined ART in fiscal 2006 and worked positively to comply with the automobile recycling law, far exceeding its recycling rate<sup>2</sup> target. On environmental impact substances (hazardous substances such as lead, mercury, hexavalent chromium and cadmium), Isuzu achieved the targets of the Japan Automobile Manufacturers Association, Inc. for all its vehicles. The new ELF became a more environmentally friendly truck by obtaining a lead reduction goal as high as that for passenger cars. As for mounted equipment, Isuzu is contributing to the promotion of recycling by providing related information through JAMA to allow appropriate treatment or recycling of waste materials as necessary, while at the same reducing environmental impact substances.

Item	Recycling rate	Standard value <sup>3</sup>
ASR	72.6%	30% or more (FY2005-2009)
Air bag	94.2%	85% or more

1. ART: Automobile Shredder Residue Recycling Promotion Team consisting of Isuzu and 10 other auto manufacturers to recycle shredder dust (automobile shredder residue) properly, smoothly, and efficiently.  
 2. Amount considered thermal-recycled or material recycled/Input  
 3. Standard values set by the Automobile Recycling Law

# Building Environmentally Friendly Plants

Four key issues for building plants that are kind to the environment and community

## Isuzu's Approach to Building Environmentally Friendly Plants

Vehicle production impacts the environment across a wide range, from local communities to the earth.

At Isuzu, the Plant Environmental Committee leads us in tackling four key issues aimed at ideal production plants under its plant management philosophy "Think Globally, Act Locally." To make our plants friendly to their local communities, too, we work with our affiliate companies, as well as our group companies at home and abroad.



## Message from the Chairperson of the Domestic and Overseas Plant Environment Committees—Environment and Plants



Haruki Mizutani, Committee Chairperson and Executive Officer

is working to improve product quality and production efficiency, while at the same making a great effort towards environmental protection. For example, Isuzu tackles environmental preservation as it does in Japan where production is transferred overseas as an independent operation and promotes such activity from a global viewpoint.

### Isuzu as a Global Leading Company

To build an environmentally friendly plant, it is one of our important tasks to minimize the consumption of energy and material. We are addressing this challenge through a two-way approach designed to take measures for equipment, such as the introduction of a co-generation system and to foster a spirit of improvement at plants. We are also implementing horizontal operations globally, with the emphasis on efficiency improvement.

\*IMM: Isuzu Manufacturing Management

## Consolidated Activities of Groups and Environmental Preservation Efforts

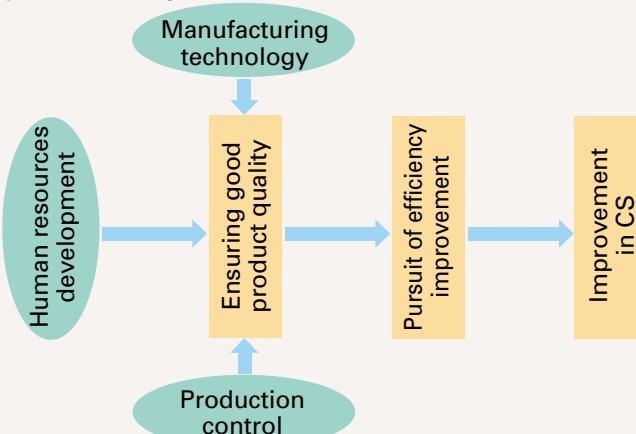
Isuzu draws up an Isuzu Production Management System (IMM\*) for its overseas affiliate companies in Japan and abroad. Under the system, it

## Expanding IMM to Group Companies

IMM represents a compilation of our wish to manufacture good products without compromise. It is the basis of our manufacturing philosophy. Isuzu is ensuring product quality through the introduction and mastery of IMM. It is introducing IMM into Fujisawa Plant and other plants at home and abroad as an essential requirement for a global leading company.

In pursuit of efficiency improvement, Isuzu is striving to eliminate waste wherever possible. It is also contributing to environmental activities such as energy conservation and zero emissions.

### Equation for Victory with IMM



## Prevention of Global Warming and Reduction in CO2 Emissions

Isuzu's manufacturing department plans to cut CO2 emissions by 50% from fiscal 1990 levels, by fiscal 2010. Emissions in fiscal 2006 were 186,000 tons of CO2, which represented a reduction of 9.8% per unit of production over the previous year, enabling us to meet our reduction plans and goals.

Our major initiatives include the introduction of co-generation and achievement of energy conservation with multi-can type combustor boilers, energy saving patrols by the Energy Conservation Committee, the promotion of eco-stop\* and idling-stop\* activities, energy conservation by attaching general-purpose oil pressure units to accumulators (pressure reservoirs) and relocation and rationalization of painting shops.

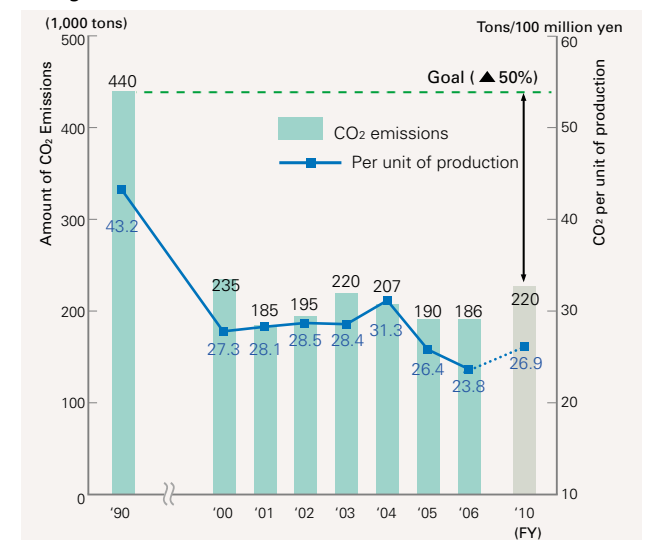
\* Eco-stop: A system to turn off power sources for multiple machines collectively at the end of production  
 Idling-stop: A system to automatically turn off unattended machines when parts supply is interrupted and automatically turn the machines on again when parts arrive

### Eco-stop and Idling-stop Activities

We are implementing energy conservation activities to make effective use of electric energy on machine-processing production lines where a number of machines and incidental equipment are in operation.

Our Tochigi Plant, where eco-stop activities are underway, has significantly improved energy conservation by developing a system to automatically cut off oil pressure and turn off operating power sources by closing air valves. It has also introduced a batch control system that uses centralized air bulbs to improve energy efficiency. The plant has begun to provide idling-stop and start functions for unattended operating equipment. These activities, which are being horizontally expanded to our Fujisawa Plant, contribute to a reduction in CO2 emissions and the prevention of global warming.

### Change in the Amount of CO2 Emissions

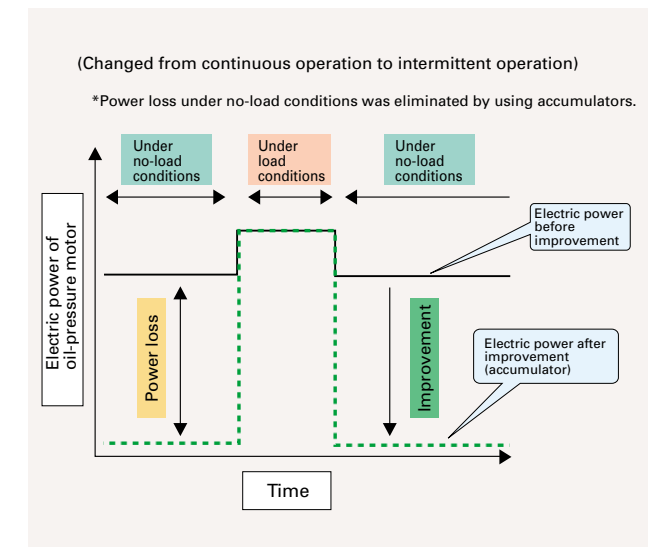


## Energy Conservation by Installing Accumulators

Motors for oil-pressure machines used in production are continuously operating regardless of whether they are under load or no-load conditions. To solve the problem of energy loss resulting from such conditions, we attached accumulators to general-purpose oil-pressure units. This allows us to save energy by drawing power only when necessary.

In fiscal 2006, our Fujisawa and Tochigi plants modified as many as 110 pieces of equipment themselves. This improvement resulted in reducing power loss remarkably.

### Effects of Energy Conservation by Utilizing Accumulators



Members of the Global Manufacturing Engineering & Planning Department with their recently presented Manufacturing Division Executive award.

### Reduction of Waste and Efficient Use of Resources

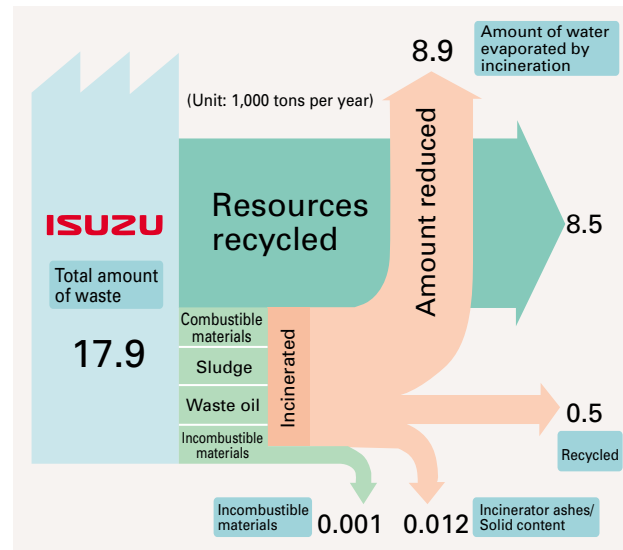
#### Aiming at a higher level of zero emission

Isuzu defined "Zero Emission" as a 95% reduction in the amount of landfill disposal of industrial waste, compared to that in fiscal 1995, by the end of fiscal 2001, and actively promoted waste reduction activities. As a result, it achieved Zero Emission in fiscal 2001, with a reduction of 97.6%.

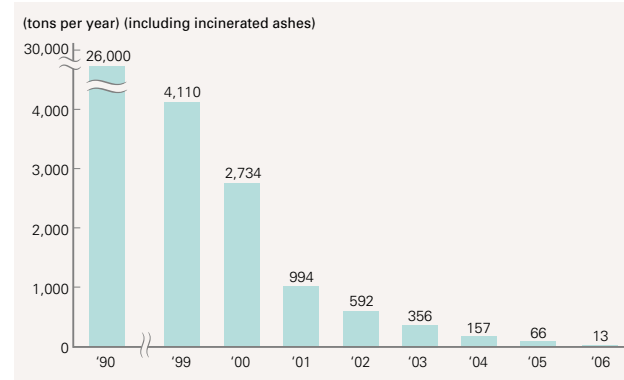
We newly set a challenging goal of lowering the amount of landfill disposal of waste for each of our two plants to one ton or lower per month, or 24 tons or lower per year in total, by the end of 2005 (including incinerator ashes), and we achieved this goal in October 2005 through cost-conscious activities.

In fiscal 2006, we continued to recycle incinerated ashes from the previous year and reduced the final amount of industrial waste to 13 tons.

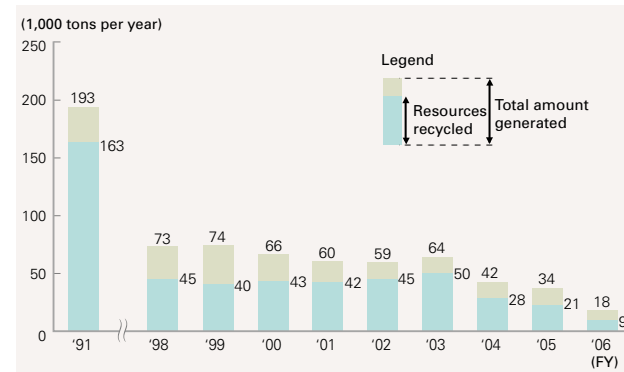
#### Outline of Waste Disposal (Achievement in Fiscal 2006)



Changes in the Final Amount of Industrial Waste



Changes in the Amount of Waste Generated and the Amount of Resources Recycled



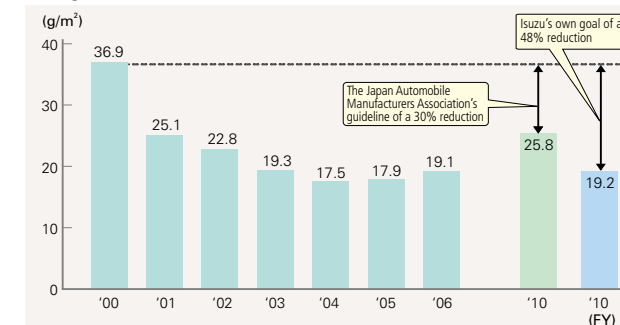
#### Major examples of our efforts

- Active promotion of separate collection; recycling of resources through decomposition and scrapping
- Campaign for reducing the amount of waste/incineration and packaging wood
- Recycling of incinerator ashes
- Cooperative activities with parties outside the company: joint environmental declaration with waste operators, construction of a Zero Emission Network, etc.

### Reduction of Environmental Impact Substances and Compliance with Regulations Reducing Volatile Organic Compounds (VOC)

Emissions of VOC, which are a cause of optical chemical oxidant, were restricted in the amended Air Pollution Control Law, implemented in 2006. Isuzu has been promoting the reduction of organic solvent used in the painting process since before the enforcement of the amended law. It set a goal of achieving a level of 19.2g/m<sup>2</sup>, which is stricter than that of the Japan Automobile Manufacturers Association, and strived for improvement by reducing the use of paint solvents, collecting cleaning thinners, and introducing a dry furnace with exhaust gas combustion equipment. As a result, Isuzu has been achieving its goals of reducing VOC emissions since fiscal 2004.

Change in the Amount of VOC Emissions

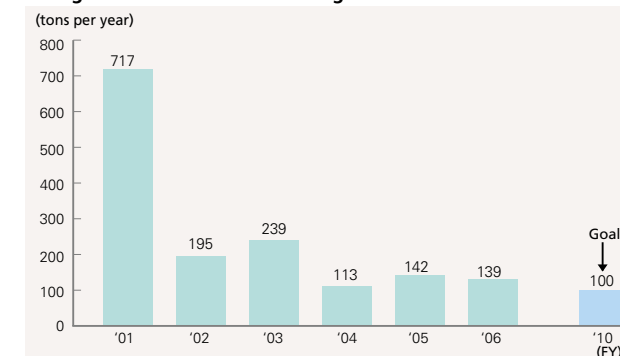


#### Chemical Substance Management and Response to the PRTR Law

In addition to the regulatory restrictions, Isuzu has established a management rule for controlled substances as an internal regulation. The rule classifies chemical substances into three categories: "prohibited," "conditionally available," and "available" (caution needed), in order to implement proper management and reduction in usage. In response to the PRTR Law\*, we have designed a chemical substance management system that links purchase management information with the PRTR system. We have thus made efforts to understand, manage and reduce the targeted substances, which led to a reduction of 3.5% over the previous year in the amount of emissions in fiscal 2006.

\* PRTR (Pollutant Release and Transfer Register) Law: Law concerning the understanding of the volumes of specific chemical substances released to the environment and the promotion of improved management.

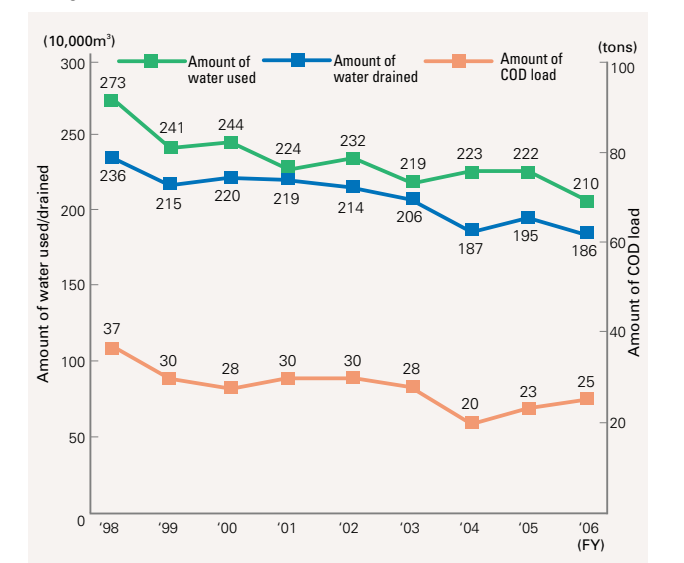
Change in the Amount of the Target Substances of PRTR



### Prevention of Air/Water Pollution and Compliance with Regulations

Isuzu regards the prevention of air and water pollution as the first step of environmental preservation activities and has established its own standards, stricter than those of laws and regulations, to constantly monitor drainage and emissions. The status of management and compliance with laws and regulations are reported to the Plant Environmental Committee for proper application and management within the environmental management system.

Changes in the Amount of Water Used/Drained and the Amount of COD Load



#### Preventing Dioxin Emissions

Tochigi Plant suspended the use of its incinerator in 2002 and has since been committed to the disposal of waste through its contractors. Fujisawa Plant uses an incinerator generating 0.079ng-TEQ/m<sup>3</sup>\* of dioxin, which is far lower than the regulated value (10ng-TEQ/m<sup>3</sup>). We will keep curbing emissions from incinerators through strict combustion control and a reduction of incinerator waste volume.

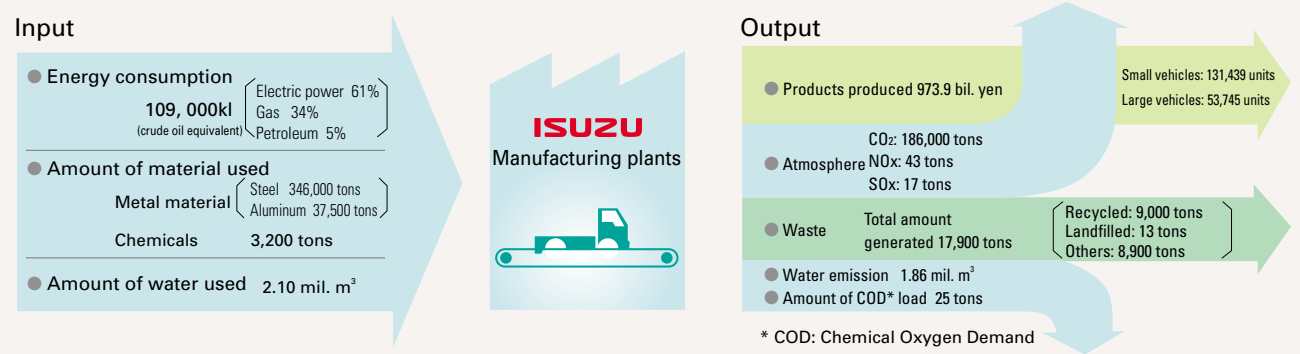
\* ng: nanogram. A unit representing one one-billionth of a gram  
TEQ: Toxic Equivalents Quantity

#### Prevention of Soil and Groundwater Contamination

Isuzu formerly used three chlorine organic solvent\* substances but has already terminated their use. We have independently been studying their effects on soil and groundwater in plant/office sites since 1996, to confirm that no contamination spreads outside our premises from polluted areas. We have also taken measures to purify the polluted areas and have reported the results to public administrators.

\* Three substances: trichloroethylene, 1-1-1 trichloroethane and dichloromethane

#### Material Balance in Production Plants (the Amount of Input and Output of Resources)



# Environmental Conservation Activities by Isuzu and Its Group Companies

Isuzu is implementing various environmental conservation activities along with its group companies at home and abroad. Let us introduce how our main Fujisawa Plant and one each of our domestic and overseas group companies are pursuing activities related to environmental protection.

## ■ Fujisawa Plant



Makoto Sasaki,  
Executive Officer and Plant Executive

### Slogan

Based on our belief that efficient production through the total elimination of waste contributes to reducing environmental impact, we always keep in mind how customers will react to us and devote our efforts to the creation of products that will help to protect the global environment as a mother plant for Japanese and overseas production sites.

### Production and Environmental Activities

Fujisawa Plant is a main domestic plant that assembles trucks, Isuzu's major product lines and produces main automotive parts such as engines and transmissions. As a mother plant for overseas production sites, it accepts trainees from abroad and provides support for upgrading overseas plants.

Based on the IMM,\* which is Isuzu's basic manufacturing concept cultivated over years, we are working on the reduction of environmental impact as a key issue. Major activities are:

1. CO2 reduction/promotion of energy saving campaigns
2. Promotion of Zero Emission activities/reduction in landfill disposal
3. Reduction in environmental impact substances
4. Full compliance with the requirements of environmental management

Last year, we united our efforts to unveil a new model ELF as an environmentally friendly truck. We made our policy for environmental preservation clear through the release of this new model. We at Fujisawa Plant have been positively implementing ISO 14001-based environmental conservation activities.

\*IMM: Isuzu Manufacturing Management



Line-off ceremony for the new ELF

### Environmental Preservation and Concrete Efforts

With great emphasis on the prevention of global warming, we are taking various measures to cut CO2 emissions by using soft and hard tools. Specifically, our positive efforts include the introduction of a co-generation system and multi-can type combustion boilers, plant-wide energy saving patrols by the Energy Conservation Committee and idling-and eco-stopping of machine tools. These initiatives resulted in a 9.8% reduction in CO2 emissions per unit of production.

We have already achieved our Zero Emission target through our efforts to reduce waste. Further efforts are underway to reduce landfill disposal to one ton per month. With regard to VOC emissions, we have also fully met the requirements of the Air Pollution Control Law.

### Relationship with Local Communities

Fujisawa Plant is carrying out various activities, such as a summer evening festival and trash collection. About 20,000 local residents enjoyed the evening festival. We regularly clean up surrounding areas to help create a beautiful local environment.



The summer evening festival was enjoyed by local people.

## ■ Overseas Group Company: Isuzu Motor Co., (Thailand) Ltd.

Founded in 1966, Isuzu Motor Co., (Thailand) Ltd. (IMCT) is a key company for business operations in the ASEAN countries. It manufactures medium- and light-duty trucks, the D-MAX pickup truck with energy efficient common rail diesel engines and the MU7 sport-utility vehicle. The company was certified as ISO 14001 compliant in February 2001. The Environmental Committee at IMCT leads activities related to environmental improvement.

IMCT's energy conservation efforts include the greening of the plant site, the introduction of energy-efficient electric fans and a



Shunichi Satomi, President



ISO 14001 certificate



A complete view of the plant

review of preset temperatures for air conditioners. All these initiatives resulted in a 5% reduction in CO2 emissions over the previous year. The company is working extensively on the improvement of parts distribution through a milk-run approach. Efforts are also being made to conserve resources through the re-use of waste water and a reduction in the use of water. IMCT has succeeded in reducing landfill disposal of waste to 10% by ensuring separate garbage collection and promoting recycling. The company is determined to continue these activities as one way of contributing to the protection of the global environment.

## ■ Domestic Group Company: Nippon Fruehauf Company, Ltd.

Nippon Fruehauf Company mainly manufactures van bodies, with its head office and plant in the city of Atsugi, Kanagawa Prefecture. Amid the growing concern about environmental problems, Nippon Fruehauf obtained ISO 14001 certification in November 2002.

In our efforts to manufacture environmentally friendly products as stated in our environmental policy, we are reducing environmental impact substances, switching from natural lumber to

planted trees and making lightweight freezers and wing vehicles. We are also environmentally conscious in production, reducing the amount of organic solvents through the use of powdered paint and supplying an appropriate amount of air by controlling the number of air compressors in use.

We hold a rose show on the third Sunday in May every year, where 800 roses of 300 different kinds grown by company employees are on display. A record 20,000 people enjoyed the roses on the 20th anniversary exhibition, held in fiscal 2007.



Yoshinobu Hiki, President



Rose exhibition



A complete view of the plant

# Consolidated Environmental Activities in Manufacturing

Isuzu has been promoting environmental preservation activities, together with 10\* domestic and 6\* overseas consolidated group companies.

## Consolidated Environmental Activities by Domestic Consolidated Group Companies

The companies are striving to achieve the goals set for fiscal 2010 with focus on three key issues: global warming, waste reduction and environmental impact substance reduction.

Eight domestic group companies were forging ahead with consolidated environmental activities, but the number of companies was reduced to seven, as a result of the merger between Isuzu Castech Corporation and Automotive Foundry Co., Ltd. (to become I Metal Technology Co., Ltd.). Three new companies joined the group in fiscal 2007.

\* Domestic consolidated group companies: I Metal Technology Co., Ltd.; TDF Corporation; J-Bus Ltd.; Jidosha Buhin Kogyo Co., Ltd.; Nippon Fruehauf Company, Ltd.; Shonan Unitec Ltd.; Isuzu Engine Manufacturing Hokkaido Corporation  
Three new group companies: Isuzu Body Co., Ltd., I PACK CO., LTD., Isuzu Marine Engine Inc.

### 1. Change in the Amount of CO2 Emissions (Unit: 1,000 tons)

FY	2004	2005	2006	Goal for 2007	Goal for 2010	
Isuzu, non-consolidated	207	190	186	184	220	
Nine consolidated companies	Emissions	341	333	335	(-)	(-)
	Emissions per unit (ton/100 million yen)	40.3	36.3	34.4	39.0	37.3*

\* Goal: Reduction by 6% or more per unit from FY2004 level by FY2010

### 2. Change in the Amount of Landfill Waste (Unit: ton)

FY	2004	2005	2006	Goal for 2007	Goal for 2010
Isuzu, non-consolidated	157	66	13	24	24
Eight consolidated companies	9,231	5,706	4,303	4,234	4,743
Total of nine consolidated companies	9,388	5,772	4,316	4,258	4,767*

\* Goal: Reduction by 50% or more from FY2004 level

### 3. Change in the Amount of PRTR Emissions (Unit: ton)

FY	2004	2005	2006	Goal for 2007	Goal for 2010
Isuzu, non-consolidated	113	142	139	135	100
Eight consolidated companies	250	277	260	260	245
Total of nine consolidated companies	363	419	399	395	345*

\* Goal: Reduction by 30% or more from FY2003 level

## Isuzu Engine Manufacturing Hokkaido Corporation honored by the Minister of the Environment

The First National Convention for Three Rs Promotion held in the city of Nagoya in October 2006, sponsored by the Ministry of the Environment, Isuzu Engine Manufacturing Hokkaido Corporation received an award for its outstanding contribution to the building of a recycling-oriented society through its pioneering and creative approach. The company was highly commended for its original efforts to reduce industrial waste (grinding waste) generated by manufacturing operations.



Certificate of commendation

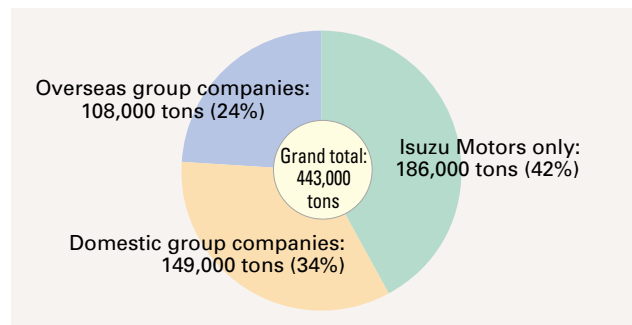
## Consolidated Environmental Activities by Overseas Consolidated Group Companies

Overseas group companies, like domestic group companies, are positively addressing important issues such as the prevention of global warming and the reduction of waste and environmental impact substances. Their activities are specifically tailored to the needs of individual countries with different regulations and requirements. Efforts to prevent global warming and reduce CO2 emissions are key global concerns.

- Targets for CO2 reduction: 1% reduction per year per unit of production and 6% reduction in fiscal 2010 (from fiscal 2004 levels)

\* Overseas consolidated group companies: Isuzu Motor Co., (Thailand) Ltd.; Isuzu Engine Manufacturing Co.,(Thailand) Ltd.; IT Forging (Thailand) Co., Ltd.; Thai International Die Making Co., Ltd.; Isuzu Motors Polska Sp.zo.o (Poland); DMAX, Ltd. (USA)

### CO2 Emissions by Isuzu Group



Global Environmental Meeting



Members visiting a local plant

# Site Data

Given below are the typical major emission indicators for air, water and PRTR at the Fujisawa and Tochigi Plants.

## Fujisawa Plant Address: 8 Tsuchidana, Fujisawa-shi, Kanagawa, Japan

### 2006 PRTR emission report (Fujisawa Plant)

(Unit: kg)

No.	Chemical substance	Amount handled	Amount of emission				Total emissions	Amount transferred Total amount transferred
			Emission to air	Emission to public waters	Emission to soil	Landfill		
1	Zinc water-soluble compounds	1,200		49			49	320
40	Ethylbenzene	61,000	24,000				24,000	6
43	Ethylene glycol	1,200,000						1,100
63	Xylene	114,000	74,000				74,000	12
176	Organic tin compound	6,500						260
224	1,3,5-trimethylbenzene	4,700	3,600				3,600	1
227	Toluene	38,000	11,000				11,000	
299	Benzene	1,600	4				4	
179	Dioxin		37*				37*	79*

\* mg-TEQ

#### Air quality

Item	Facility	Regulated value	Actual measurement	
			Maximum	Average
NOx (ppm)	Boiler	60*	18	15
	Incinerator	150	71	67
	Metal melting furnace	200	43	28
	Heat-treating furnace	200	180	139
	Paint/drying furnace	230	29	21
Dust (g/Nm <sup>3</sup> )	Boiler	0.1	0.0047	0.003
	Incinerator	0.15	0.098	0.097
	Metal melting furnace	0.2	0.14	0.05
	Heat-treating furnace	0.2	0.011	0.008
	Paint/drying furnace	0.1	Less than 0.002	Less than 0.002
SOx (Nm <sup>3</sup> /h)	(Total amount regulation)	21.82	1.55	1.03

\* The change in the regulated value of the boiler is due to the change in fuel type (from diesel oil to gas.)

#### Water quality

(Discharged to Hikichi River)

Item	Regulated value	Actual measurement		
		Maximum	Minimum	Average
pH	5.8–8.6	7.9	7.3	7.7
COD mg/l	60	20	9.5	13.6
BOD mg/l	60	17	5.0	8.5
SS mg/l	90	5.8	less than 5	5.1
Oil content mg/l	5	2.0	1.0	1.1

- No environmental accidents
- Environmental complaints: 1

Mowed grass scattered on the old test-driving course. (August 2006)

Action: The grass was removed and covered with a sheet to deal with the complaint. (September 2006)

## Tochigi Plant Address: 2691 Oaza Hakuchu, Ohira-machi, Shimotsuga-gun, Tochigi, Japan

### FY2006 PRTR emission report (Tochigi Plant)

(Unit: kg)

No.	Chemical substance	Amount handled	Amount of emission				Total emissions	Amount transferred Total amount transferred
			Emission to air	Emission to public waters	Emission to soil	Landfill		
40	Ethylbenzene	10,000	10,000				10,000	
43	Ethylene glycol	35,200	200				200	35,000
44	EG monoethyl ether	1,300	1,300				1,300	
63	Xylene	13,000	11,000				11,000	
227	Toluene	6,000	3,900				3,900	

#### Air quality

Item	Facility	Regulated value	Actual measurement	
			Maximum	Average
NOx (ppm)	Boiler	250 or lower	120	88
	Metal heating furnace	180 or lower	130	67
Dust (g/Nm <sup>3</sup> )	Boiler	0.3 or lower	0.007	0.004
	Metal heating furnace	0.25 or lower	0.003	0.002
SOx (Nm <sup>3</sup> /h)	(Total amount regulation)	17.5	1.84	0.28

- No environmental accidents
- No environmental complaints

Notes:

1) Period covered: FY2006, which runs from April 2006 to March 2007

2) The regulated values represent the strictest numeric values of those specified in environmental laws and regulations, ordinances and pollution prevention agreements.

3) Abbreviations: PRTR: Pollutant Release and Transfer Register Law/COD: Chemical Oxygen Demand/BOD: Biochemical Oxygen Demand/SS: Suspended Solids in water.

#### Water quality

(Discharged to Nagano River)

Item	Regulated value	Actual measurement		
		Maximum	Minimum	Average
pH	5.8–8.6	7.3	7.2	7.25
COD mg/l	20	19.1	6.2	12.7
BOD mg/l	20	17.9	6.2	12.1
SS mg/l	40	5.0	1.0	3.0
Oil content mg/l	5	0.5>	0.5>	0.5>

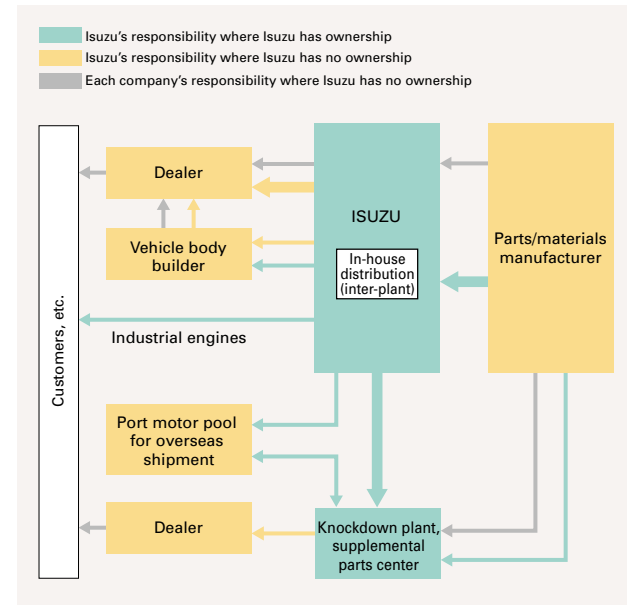
# Environmental Measures in Distribution

We have been reducing CO2 emissions by improving transport efficiency in the distribution of product vehicles, production procurement, supplemental parts, and KD parts/components, as well as by promoting Eco-driving. In compliance with the amended energy saving law, we are enhancing our compliance system by assessing transport volume in ton-kilometers and energy consumption and making energy reduction plans.

## Responses to the Amended Energy Saving Law

We are promoting energy saving in distribution as part of Isuzu's responsibility, including the coverage of freight transportation, by which we have been trying to improve the transportation efficiency of those of which Isuzu has no ownership, in addition to the

### Isuzu's Responsibility in Distribution



coverage of freight transportation of those of which Isuzu has ownership.

## Measurement Results According to the Amended Energy Saving Law

In accordance with the amended energy saving law, we surveyed our transport volume in ton-kilometers and energy consumption for fiscal 2006, the first year in which the law was enforced.

As a result, Isuzu was designated as a specified shipper. We are therefore striving towards a 1% energy reduction or more per year, starting from the next fiscal year.

Transport category	First half of FY2006	Second half of FY2006	FY2006 (Total)
<b>Transport volume (in 1,000 ton-kilometers)</b>			
Product vehicle	83,127	70,683	153,810
Production procurement	102,118	98,579	200,697
Supplemental parts	18,415	18,551	36,966
KD parts/Components	5,610	6,117	11,727
Other	1,285	1,399	2,684
Subtotal	210,555	195,329	405,884
<b>Energy (G.J)</b>			
Product vehicle	121,237	105,778	227,015
Production procurement	167,024	161,871	328,895
Supplemental parts	39,185	39,386	78,571
KD parts/Components	8,909	9,839	18,748
Other	4,143	4,510	8,653
Subtotal	340,498	321,384	661,882

## FY2007 Plans for Energy Saving Activities

Based on our FY2007 plans, we aim at reducing energy consumption by 1% or more each year.

FY2007 target for energy saving activities

➔

Target value: 1% reduction or more

**FY2007 Distribution rationalization Pursuit of transport efficiency improvement**

- FY2007 Activities aimed at improving distribution efficiency
  - Reduction of transport distance:
    - Increase of inland vanning<sup>1</sup>, review of delivery routes
  - Improvement of loading efficiency:
    - Allocation of vehicles according to cargo volume
    - Review of packaging specifications, improvement in mixed loading
    - Increased use of returnable racks for packaging<sup>2</sup>
- Eco-driving seminars for transport operators
  - Start of utilization of tools for energy saving/linking up with sales campaign for energy-efficient vehicles

**Promotion of Eco-driving**

- Providing information monitored by "Mimamori-kun"—Increasing the use of "Mimamori-kun"
- Support for fuel-saving seminars
- Increasing the use of fuel-efficient vehicles: Utilization of CNG vehicles

1. Inland vanning: An approach to distribution improvement aimed at the reduction of transport distances by vanning (loading knockdown cases with component parts into containers) at packing plants in inland areas and in their vicinity to eliminate work in port areas  
2. Use of returnable racks: An attempt to increase the container filling rate and reduce material and labor costs by switching from disposable packing cases to returnable containers and circulating these between Isuzu and its overseas destinations.

## Aiming to Reduce Harmful Emissions by 1% or More Per Year

### Improvement in the Distribution of Finished Vehicles

The Isuzu Group is working to reduce exhaust gas and CO2 emissions by directly transporting finished vehicles to dealers and designated locations instead of moving them to remote depositories. In fiscal 2006, the volume of direct transport reached 92%.

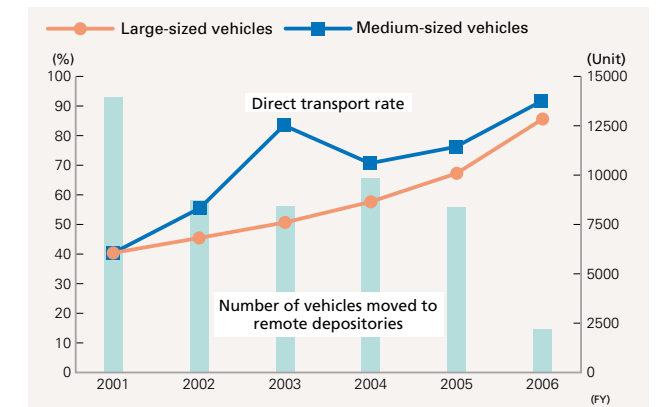
### Promotion of Eco-driving

We have introduced a safety recorder (a GSP-based driving control system) as a tool for energy conservation in the transport of finished vehicles and safety driving. Efforts are being made to promote fuel-efficient and safe driving.

We have been encouraging eco-driving with *Mimamori-kun*.

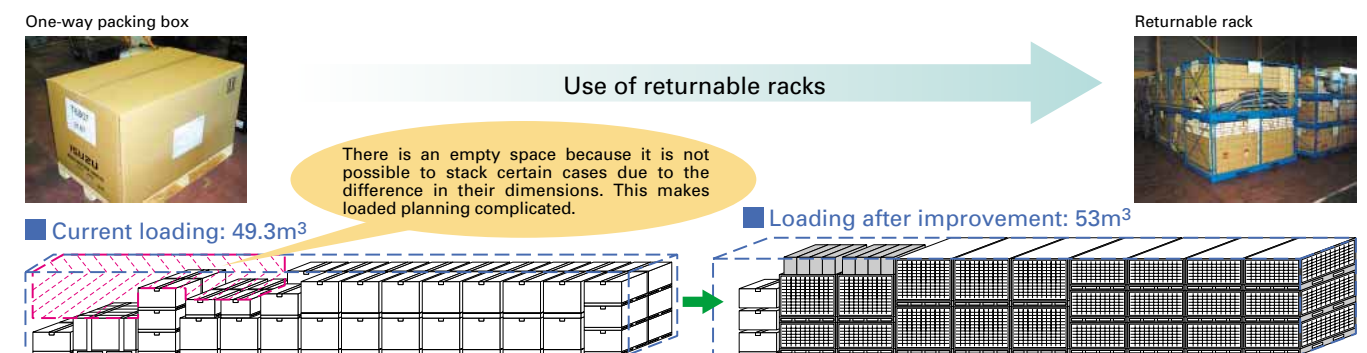
In fiscal 2006, cargo transport operators started using *Mimamori-kun* for energy-efficient driving.

### Improvement in the Distribution of Finished Vehicles

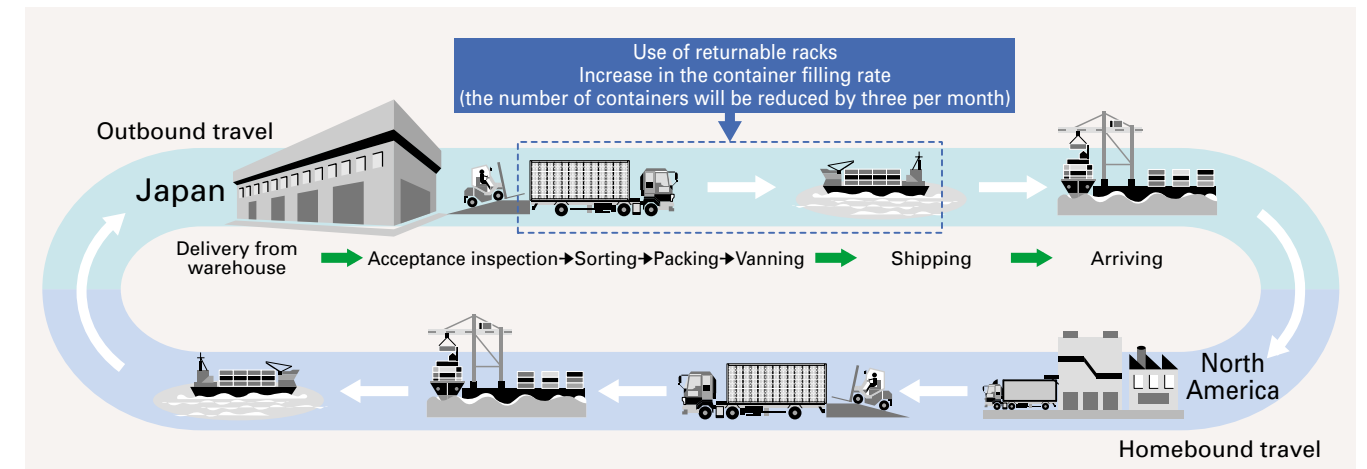


## Example of Improvement Activities—Shipment of Supplemental Parts Using Returnable Racks

We will economize on material costs by changing shipping containers from one-way packing boxes to returnable racks and circulating them between Japan and North America. We will also reduce CO2 emissions by raising the container filling rate.



### Conceptual Diagram of Transport between Japan and North America





# Isuzu aims to become a company that is trusted and respected by society.

Through socially responsible business activities, Isuzu is striving to become a company that is trusted and respected by all stakeholders, including local communities, global society, customers, shareholders, business partners and employees. This social report describes Isuzu's relationship with its stakeholders.

**Approach to  
Safety Technology**  
(p.44)

**Relationship  
with Customers**  
(p.45-p.46)

**Relationship with  
Local Communities**  
(p.47-p.48)

**Communication  
with Society**  
(p.49)

**Relationship with  
Business Partners  
and Shareholders**  
(p.50)

**Relationship  
with Employees**  
(p.51-p.52)



# Approach to Safety Technology

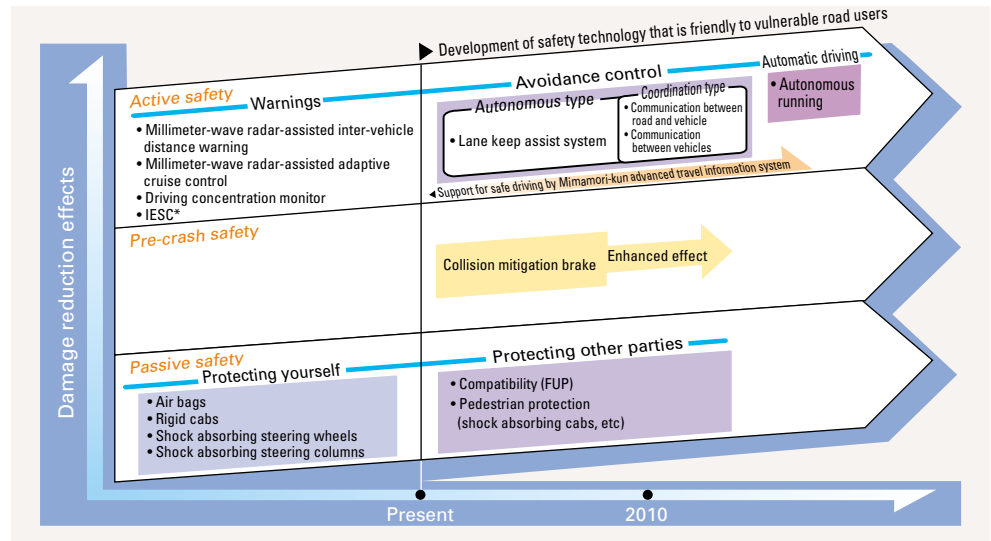
Isuzu is always striving to improve its safety technology, which is a great social responsibility of a truck manufacturer.

## Direction of Safety Technology

Under the concept "Safety is standard equipment," Isuzu has been working continuously to develop and offer safety equipment from the standpoints of active safety (accident prevention safety technology) and passive safety (collision safety technology). Isuzu is actively developing safety technology further "to protect other parties," such as pedestrians and vehicles.

\*IESC: Isuzu Electronic Stability Control

## Direction of Safety Technology



## New Safety Technology

### Advanced View Assist Technology (VAT) \* 4x2 vehicles excluded

VAT provides total support to drivers in their recognition, judgment and operation with the millimeter-wave radar-assisted inter-vehicle distance warning or millimeter-wave radar-assisted adaptive cruise control, which monitors vehicle-to-vehicle distance with advanced

millimeter-wave radar and a driving concentration monitor that warns of erratic steering. This sets a new standard for the safety of large vehicles—an advanced concept of active safety to prevent accidents by anticipating danger.

#### VAT Functions

<p>View Assist Technology</p>	<p><b>No preceding vehicle</b></p> <p>No preceding vehicle on multi-display</p>	<p><b>A vehicle appearing ahead</b></p> <p>Multi-display showing the distance from a preceding vehicle</p>	<p><b>Approaching a vehicle traveling ahead</b></p> <p>Multi-display and an alarm warn the driver</p> <p>Beeps</p>
	<p>Traveling at a set speed of 75 km/h</p>	<p>When a vehicle traveling at a speed lower than the set speed appears ahead, the vehicle slows down and follows the preceding vehicle at a safe following distance</p>	<p>The vehicle slows down by using an auxiliary brake and a buzzer warns the driver to apply the foot brake</p> <p>Beeps</p>
<p><b>Millimeter-wave radar-assisted inter-vehicle distance warning</b></p>	<p><b>The accelerator is pressed</b></p> <p>Traveling at a set speed of 75 km/h after having accelerated</p>		
<p><b>Millimeter-wave radar-assisted adaptive cruise control*</b> (where a vehicle's traveling speed is set at 75 km/h)</p>	<p><b>Erratic steering occurs</b></p> <p>Multi-display and a buzzer warn the driver. In case steering becomes more erratic the air conditioner starts operating.</p> <p>Beeps</p>		
<p><b>Driving concentration monitor</b></p>	<p>Multi-display and a buzzer warn the driver. In case steering becomes more erratic the air conditioner starts operating.</p> <p>Beeps</p>		

\* In the millimeter-wave radar-assisted adaptive cruise control, only auxiliary brakes (the engine brake, exhaust brake and downshifting) work when the vehicle slows down. Therefore, note that the driver needs to use the foot brake when the vehicle suddenly approaches a preceding vehicle or it slows down abruptly.

# Relationship with Customers

We receive various feedback from our customers through our Customer Center and other communication channels. This feedback is shared among our group companies and is reflected in our products and services.

## Enhancing Product Reliability and Safety

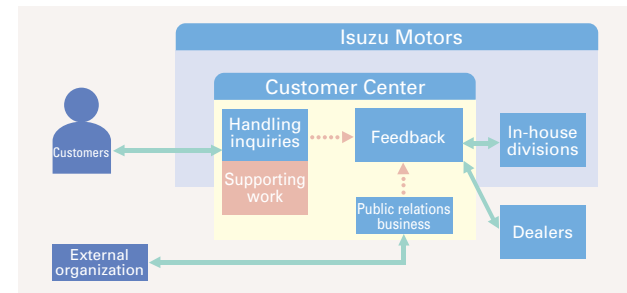
Reliability and safety are the most important key words with commercial vehicles. At Isuzu, quality always comes first to ensure product reliability and safety. With rigorous quality standards, complete quality control is implemented in all stages of vehicle development, production and marketing. In the event of accidents, our engineers team up with specialists to investigate their causes fully from diverse viewpoints, and endeavor to insure quality and safety. When necessary, we are prepared for a quick response to any product recall.

All quality-related information is shared at Isuzu, from the top management down and by all dealers. We share customer opinions among the group companies as valuable suggestions, and try to improve product quality by reflecting such information in the development of products and services.

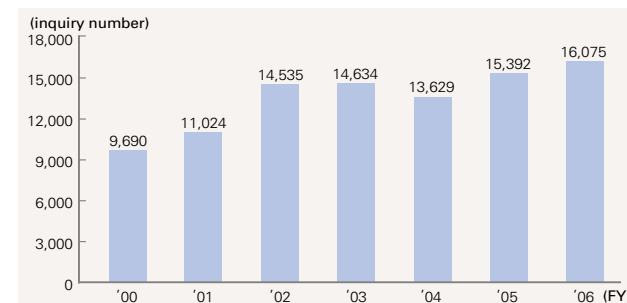
## Isuzu Customer Center

The Customer Center is available for customers' inquiries and comments about our products. In fiscal 2006, we received about 16,000 inquiries and comments through our toll-free phone service and e-mails. All these comments are shared among our group companies and are reflected in their product development and business activities.

### Customer Center Business Flow Chart



### Changes in Inquiry Numbers



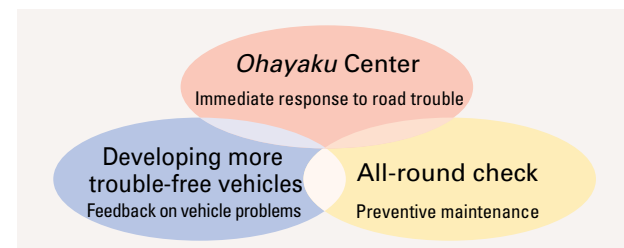
In fiscal 2006, we received a growing number of calls from customers that made us aware of the critical public awareness of corporate social responsibility and compliance with the law. Customer inquiries about repair-related matters have been on the increase in recent years. We have also received many responses to our *Mimamori-kun*, together with inquiries, and there have been many words of encouragement from our loyal customers. Frequently asked questions are posted on our Website for useful access. We will quickly respond to various comments from customers.

## Zero Road Accident Campaign

Isuzu is running a zero road accident campaign aimed at eradicating road accidents. This campaign is focused on three activities: an all-round check of vehicles in which they are inspected mainly for possible breakdowns when brought into dealership service plants; *Ohayaku Center*\* quick services in which emergency action will be taken for breakdowns around the clock, and the causes of road accidents will be fed back to the staff in development without delay; and efforts to develop more reliable vehicles. Isuzu will continue the zero road accident campaign to qualify as a reliable partner dedicated to customer support in transportation.

\* *Ohayaku Center*: A support center with operators on standby, 24 hours per day, 365 days per year, to answer emergency calls about breakdowns or traffic accidents (daytime calls on weekdays will be transferred to the nearest dealer).

### Three Mainstays of Our Zero Road Accident Campaign



### Zero Road Accident Campaign Symbol

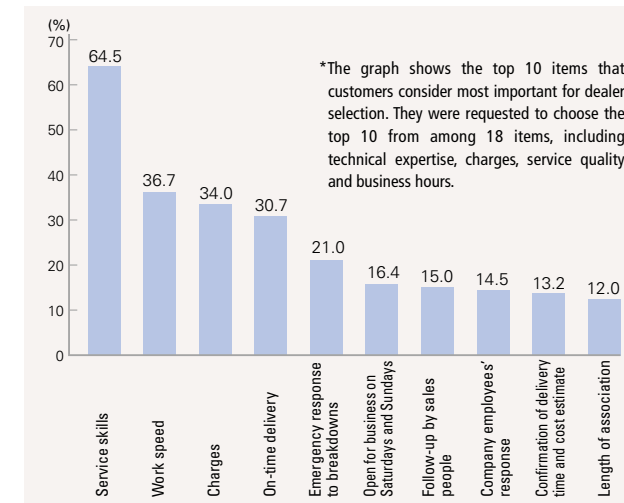


## Customer Satisfaction Survey with Isuzu Dealers

To create attractive service plants, we regularly conduct surveys on customer satisfaction with the services of Isuzu dealers. In fiscal 2006, about 5,000 customers out of 44,000 polled responded to our questionnaires (targeted at customers who used these services between August and September of 2006 and between February and March of 2007).

We use such customer feedback to find out quantitatively how customers evaluate our service plants and what they expect from us. The results of such analyses help us make service plants more attractive to customers.

### Factors Influencing the Choice of Service Plants



## Domestic Training Sessions

### Isuzu Transport Strategies Seminars

Isuzu holds transport strategy seminars every year as part of its programs to support customers in their efforts to improve management efficiency, cut vehicle-operating costs, and ensure safety. Besides lectures by specialists on trends and management strategies in the distribution industry, we give fuel-efficient driving sessions and demonstrations on safe driving, to help customers improve their management efficiency.



Isuzu's transport strategies seminar

## Isuzu's Seminar to Reduce Delivery-vehicle Accidents

This seminar is held annually for customers in the delivery business to help reduce traffic accidents and strengthen safety measures. In fiscal 2006, a total of 862 people attended this seminar and the transport strategies seminar. More than 10,000 customers have participated in these workshops so far.

## Service Clinic for Overseas Customers

### Overseas Service Clinics

We regularly hold service clinics to inspect customers' vehicles free of charge and respond to various inquiries about vehicles, including maintenance. In 2006, such clinics were held in Sri Lanka, Kuwait, Saudi Arabia and Oman.

These service clinics have become very popular because service personnel from Isuzu inspect vehicles and respond directly to questions by customers. They are also helpful in educating the staff in charge of product development and customer service.



Service clinic is popular among customers

## Seminars on Fuel-efficient Driving

We held seminars on fuel-efficient driving for dealers and principal users in Japan and abroad to address issues such as environmental preservation and safety globally. For distributors and fleet users from Thailand, Mexico, and Turkey, we conducted a seminar on logistic integration, fuel efficiency and safe driving as well as a test driving session in our Hokkaido testing ground in 2006. With the attendance of the staff from our head office and their support, we also held similar workshops in the Philippines, Chile and Malaysia. They were well-received by the participants.



Event for fuel-efficient and safe test driving

# Relationship with Local Communities

Isuzu, as a Global Leading Company, has good communications with people in local communities, both in Japan and abroad.

## Domestic Communication

### Commercial Song "Isuzu Trucks"

To familiarize customers with commercial vehicles, Isuzu has been running a TV commercial with a theme song "Isuzu Trucks" since August 2004. It has been very popular with customers.

The commercial is about the small-sized ELF truck and it features scenes in which the truck is used to support people's lives. Isuzu has been striving to promote better understanding of the role of commercial vehicles in daily life.

Isuzu Customer Center has received many opinions and impressions from viewers of the TV commercial, which is now playing a part in improving communication between Isuzu and customers.

### Some of the Opinions and Impressions from Customers

- I have a son who will be three years old soon. The ELF and GIGA are his favorite trucks. He enjoys the TV commercial and sings the commercial song solo.
- My father used to own an ELF. Listening to the commercial song, I was reminded of my father who used his vehicle for work. The phrase "Keep rolling onward..." is impressive.
- The commercial song is wonderful because it reminds me of the old days. It is like a supporters' song for life.

### Isuzu Trucks

Sung by: KAZCO  
Music by: Fumio Okui  
Lyrics by: Makoto Tsukada

Cold air comes rushing in when you open up the door.  
White steam from your breath spreads out all around.  
Your hands are shivering though you try to keep them warm.  
Time to say goodbye to the stars of yesterday.

We're off. Let's head for the town, where daybreak is waiting.

Morning is starting now, here comes a brand new day.

We're off. Let's head for the shore, where the sun is rising.

Morning is starting now, here comes a brand new day.

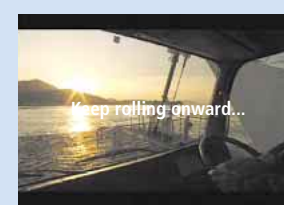
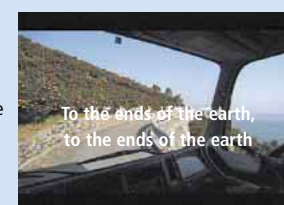
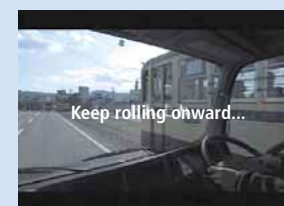
Until the end of time, until the end of time

Keep rolling onward, Isuzu Trucks.

To the ends of the earth, to the ends of the earth.

Keep rolling onward, Isuzu Trucks.

### Scenes from commercial



The commercial song "Isuzu Trucks" can be downloaded from the Isuzu Website:  
<http://www.isuzu.co.jp/museum/song/index.html>  
(Japanese only)

### Isuzu Presents a Christmas Cake to Shinagawa Ward

Every December since 1979, Isuzu has presented a Christmas cake to Shinagawa Ward in Tokyo, where the company head office is located. This is part of our community contribution activities to help with children's welfare projects. Isuzu made its 28th such presentation in December 2006.

To help children enjoy Christmas, the cake is distributed to about 60 children's day-care centers, welfare facilities and private nurseries in Shinagawa Ward, where many children enjoy the Christmas atmosphere.



General Manager Umeda in charge of General Affairs & HR Department presents a list of cake recipients to Takeshi Hamano, Chief of Shinagawa Ward (right).

## Overseas Communication Activities

### Isuzu Show and Family Day (in Thailand)

Tri Petch Isuzu Sales (TIS) holds an Isuzu Show and Family Day event across Thailand from October through April every year, to promote communication with customers in many parts of the country. TIS deepens its exchange with customers by opening its service plant to the public, providing free meals and holding a dance contest and mini-concerts by popular singers. The 50th anniversary of business in Thailand was celebrated in Bangkok in March 2007.



The Isuzu show attracted many visitors

### Presentation of the ELF to the Mexican National Environmental Bureau

In October 2006, Isuzu Motors de Mexico (IMEX) presented the Mexican National Environmental Bureau with an ELF light-duty truck to be used for monitoring air pollution in Mexico. The presentation ceremony was extensively covered by TV news, leading newspapers and magazines.



Scene of presentation ceremony

### Design Workshop in Thailand

A design workshop for student "Isuzu Design Experience (IDE) in Thailand" was held at a college in Bangkok between November and December of 2006. The workshop was co-sponsored by the Isuzu Design Center and Isuzu Technical Center of Asia (ITA). Techniques for modeling with clay (for industrial use) were taught in the second workshop following the one held in 2005 and students experienced how to make scale models using clay.



Students receiving guidance on modeling

### Nature Protection Activities in the Philippines

Isuzu Philippines Corporation (IPC) has been engaged in various social contribution activities since 2002. In 2006, IPC donated mangrove seedlings to be planted on five hectares of land on the Hundred Islands, a resort area in the city of Alaminos. IPC also helped with the recovery from the disaster caused by the typhoon that hit the southern part of Luzon Island in November 2006 and carried out various emergency support activities, including the dispatch of relief goods.



Planting mangrove seedlings

# Communication with Society

To leave a beautiful earth to our descendants, Isuzu is positively implementing various activities for environmental protection in society and local communities.

## Basic Concept

Isuzu states in its Charter on the Global Environment: In order to leave a beautiful earth to our descendants, not only through our business activities, but also as citizens of the earth, we will cope proactively with environment preservation activities of localities and society. To this end, Isuzu is actively working on social contributions through communication with society.

## Participation in Events and Exhibitions

### Participation in Eco-Products 2006

In an effort to introduce production of environmentally friendly vehicles, Isuzu has been participating in the Eco-Product exhibition since 1999, when it was first held. In 2006, Isuzu exhibited an ELF truck that meets new regulations on long-term automobile exhaust gas emissions and heavy-vehicle fuel consumption standards, as well as an advanced *Mimamori-kun* on-line service system. Panels were used to show Isuzu's environmental efforts to primary and middle school students, and children accompanied by their parents. These visitors enjoyed our environmental quizzes.



Primary school students visiting the Isuzu booth

### Promotion of CNG Vehicles

In 2006, as in the previous year, we held a publicity campaign for CNG vehicles at as many as 30 events. The number of ELF CNG vehicles registered after their certification by the Environmental Minister in 2003 topped 10,000 units in April 2007. We will continue to promote CNG vehicles.



ELF CNG vehicles displayed at Eco-car World Exhibition

### Major Events

Apr. - May 2006	Low-pollution Seminars (in Sendai and other locations)
May 2006	Fujisawa Environmental Fair; Humans and Vehicle Technology Exhibition
June 2006	Eco-car World Exhibition
July - Sept. 2006	Seminars for Natural Gas Vehicle Promotion (in Komaki City and other locations)
November 2006	2006 Nationwide CNG Vehicle Campaign using a Caravan
December 2006	Eco-products Exhibition 2006

## Social Contributions

### Joining National Antarctic Research Expeditions and Providing Technical Cooperation

Isuzu has sent company engineers to the Antarctic research base from the first expedition through the 48th expedition. As mechanical engineers in the construction team, they work mainly on overall maintenance of the base and the servicing of trucks and snowmobiles. In the Antarctic, researchers are analyzing the causes of ozone layer destruction and global warming. Vehicles and engines from Isuzu (for snowmobiles and power generation) are supporting work on the base.



Isuzu vehicles in action at the Showa Base

### Participating in the 47th Antarctic Research Expedition

—Hirofumi Suzuki, a Member of the Expedition—

I am pleased that I could finish my one-year and nine-month duties without any major accidents. To help observe the excavation of a deep ice sheet (3,035 m) on the domed base, we carried fuels and goods necessary for observation and living with five snowmobiles, each hauling seven sleds (in 500 m ranks), over a distance of 1,000 km.

When the weather was bad, the airplane arrived late. We had to wait for as long as one month in the snow-bound world, while keeping in contact with the home base. I was impressed by the grandeur of nature. It was a precious experience to have seen the aurora that is likely to swallow people in such a great natural world.



Greasing a snowmobile

### Environmental Education on Demand

As part of social studies at a school in the city of Sanda, Hyogo Prefecture, we held an environment study class on the relationship between vehicles and the environment. The class provided a lively and good learning experience for the students who had the opportunity to ride on a real vehicle and see a real engine, besides the classroom lecture. We received many questions such as "What's the weight of this vehicle?" "What's the weight of this engine?" and "How many parts are used?"



Environmental study class attended by 100 fifth-grade students

# Relationship with Business Partners and Shareholders

Isuzu is working on environmental issues together with our suppliers, both domestic and abroad, while strengthening measures to satisfy shareholders.

## Relations with Suppliers

### Basic Purchasing Policies

Isuzu makes purchases on the following three basic policies:

1. With quality as a first priority, we seek to create and offer products that satisfy customers.
2. We aim to procure domestic or overseas products, under fair competition, if they are satisfactory in quality, pricing and delivery.
3. With customer benefits as a first priority, we act for the benefit of the public and society, for the safety of people's lives, and with respect for human rights.

### Major Activities

At a briefing on our purchasing policy held in April 2007, we requested our business partners to work on the following requirements, in line with our green procurement activities.

### Assessment of Present Status and Outstanding Issues

We have nearly completed the reduction of environmental impact substances (including hexavalent chromium) and the switchover to alternatives through the cooperation of our business partners. We will continue to upgrade and implement our management and operational system (Isuzu Environmental Management System) for environmental impact substances.

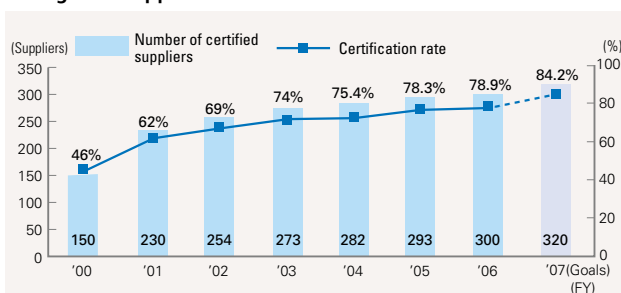
### Concrete Measures

- Complete efforts to collect material data under the management system for component materials and chemical substances  
→ Actions to comply with recycling law and against concerns about the possible influence the shipment of export vehicles
- Establishment and enforcement of Isuzu's new regulations on chemical substances→Scheduled reflection of new regulations on drawings to be issued and their implementation
- Extended application of the environmental management system→Acquisition of ISO 14001 certificates by business partners or construction of environmental management systems equivalent to ISO certification, such as Eco-stage/Eco-action 21

### Implementation of Environmental Management System

- 1) Consolidation of environmental efforts among group companies
- 2) Introduction of environmental systems by business partners

### Changes in Suppliers' ISO 14001 Certification



## Relationship with Shareholders

### Basic Philosophies

We promote the following activities to gain our shareholders' trust and meet their expectations.

1. We aim at continuously posting profits from business activities and long-term growth, as well as raising corporate value.
2. We fulfill accountability through appropriate and timely disclosure of management information and ensure management transparency.
3. We determine profit distribution by considering the return of profits to shareholders, strengthening of the management base, and our preparations for future business operations.

### Major Activities

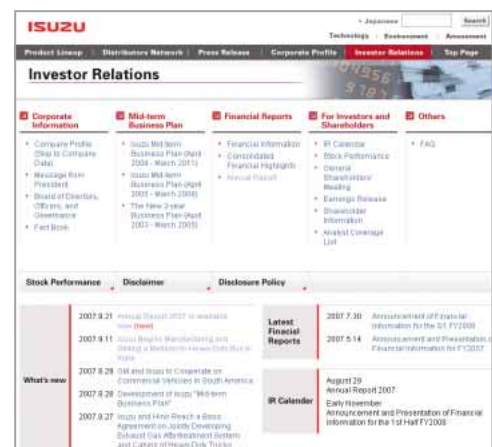
Starting from the 2006 regular shareholders meeting, an electronic voting system through the Internet was introduced for shareholders to exercise their rights, which contributes to the convenience of shareholders. We are committed to disclosing corporate information promptly and fairly to our shareholders and investors. For this purpose we hold regular briefings for analysts, institutional investors and overseas investors. IR information is posted on our Website in a timely manner.

\*IR (Investor Relations): Activities designed to provide investors with timely and fair information necessary for making investment decisions.

### IR Information on Website

On the Investor Relations page of our Website, we carry such investor information as a summary of financial results, invitations to shareholders' meetings, various financial reports, and share prices. These are updated regularly.

For three years consecutively, Isuzu has been awarded the prize for the company with the best IR Website. We also send the latest IR news to registered customers via e-mail.



<http://www.isuzu.co.jp/world/investor/index.html>

# Relationship with Employees

Isuzu regards employees as its most precious asset and aims to realize safe and sound working environments.

## Creating Safe and Sound Workplaces

Based on our safety and health concept that safety is created through the united cooperation of all employees, Isuzu strives to create a safe and lively workplace, free from accidents. Our efforts have focused on accident prevention. Our specific themes are: the prevention of industrial, traffic and fire accidents; the improvement of the workplace environment; and the promotion of health (see below).

We have been promoting the creation of a workplace where our employees ensure safety by adhering to guidelines, improving facilities, and reinforcing health control. In February 2006, our Tochigi Plant was honored by the Tochigi prefectural police for its efforts toward the promotion of safe driving, such as a lecture on traffic safety and on-site training in safe driving.

## Measures against Asbestos

According to a survey, no damage to health caused by asbestos was found among our employees and ex-employees. We are removing asbestos from plant buildings and expect this work to be completed by September 2007.

### Key Issues and Initiatives

Key issues	Initiatives
Prevention of industrial accidents	<ul style="list-style-type: none"> <li>• Increase in safety knowledge and awareness</li> <li>• Ensuring safety during work (reviewing procedure manuals, instructing work safety, etc.)</li> <li>• Confirmation of intrinsic safety of production facilities</li> </ul>
Prevention of fire accidents	<ul style="list-style-type: none"> <li>• Appropriate maintenance and control of facilities and equipment that use hazardous materials</li> <li>• Understanding and eliminating factors causing fire accidents</li> </ul>
Prevention of traffic accidents	<ul style="list-style-type: none"> <li>• Preventing traffic accidents of commuters with cars and motorcycles</li> <li>• Improving traffic safety enlightenment campaigns</li> </ul>
Health promotion	<ul style="list-style-type: none"> <li>• Providing health check and health guidance; continuing follow-up</li> <li>• Enhancing mental health</li> </ul>
Improvement of work environment	<ul style="list-style-type: none"> <li>• Continuing environmental evaluation during safety assessment</li> <li>• Promoting the creation of a comfortable work environment</li> </ul>

## Voluntary Activities by Employees: USE21

USE21 is a voluntary workgroup consisting of employees from the engineering division. The group has been actively promoting a workplace free from workplace accidents, traffic accidents and fires, by holding safety workshops. The members are working in several workshops to enhance workplace safety, to educate younger employees as well as to improve product quality and technical skills.

The safety workshop holds first-aid seminars and conducts

workplace safety patrols and traffic speed control on the premises.

The training and safety campaign workshops include lectures and



First-aid seminar

skills practice that have contributed significantly to the prevention of industrial accidents. The exchange group is performing recreational activities to promote exchange with USE21 members and their health. An Indica tournament was held in 2006.



Indica tournament

## Promoting Total Health

We promote mental and physical health among our employees and their families, with a focus on the prevention of lifestyle diseases. For example, we have a system in place that allows employees to receive 24-hour telephone health counseling and mental health counseling from external professionals.

In addition, we are conducting campaigns that focus on health building of employees and their families. The Gargling and Washing Hands campaign, as well as the Teeth Brushing campaign, were attended by many families, among others. Recreational events such as hiking, strawberry picking and orange picking help build not only health, but also communication among families.

### Health Promotion Center Activities

Complete medical check-up	4,268 persons
Examination following complete medical check-up	2,853 persons
Mental health counseling	112 persons
24-hour telephone health counseling	321 persons
Participants in hiking	1,065 persons
Participants in recreational sports	993 persons
Home guidance for the aged	337 persons
Lifestyle diseases prevention, Gargling and Washing Hands campaign, etc.	3,382 persons



Popular strawberry picking

## Gender-free Employment Opportunities and Employment of Persons with Disabilities

For the reformation and proper application of the personnel system in compliance with the amended law, Isuzu has realized complete equality between male and female employees in every area of the company's operation, from recruiting to payment. We are actively promoting people with strong motivation and excellent ability in a global society, assigning management and overseas posts to female employees as well.

From the viewpoint of child rearing, we have a longer childcare leave system than the legal requirement so that women can have more opportunities to work in society. The legally regulated childcare leave is one year and six months, but Isuzu allows a maximum of two years and six months of absence for child rearing. Twenty-four employees took childcare leave in fiscal 2006 (one male and 23 females).

We are also promoting the employment of disabled persons with a view to realizing a society where people support each other, regardless of disabilities. The employment of persons with disabilities in fiscal 2006 was 1.82%, which exceeded the legal rate and the average rate of other private sector companies for the seventh straight year.

## Employee Satisfaction Survey

In December 2006, Isuzu conducted an Employee Satisfaction Survey in order to utilize survey results to improve the work environment and determine new measures for improvement. The survey centered on finding how employee motivation had changed since the previous poll, held in 2004.

The survey results revealed that employee satisfaction has improved with factors involving the company such as its management policy, orientation, potentiality and business performance. On the contrary, it was found that customer satisfaction had declined with factors involving individual employees such as their work environment, human relations and the types of their work. These findings suggest that individuals take more interest in work as their loyalty to the company increases.

Rewards and environmental improvement were cited as factors that affect employee motivation. However, it was indicated that employee motivation increases with each survey.

We will remain focused on the motivation of employees, according to the Employment Satisfaction Survey, and utilize the results as one of the measures to confirm the orientation of the company.

## Personnel Development

We reviewed our training system in line with the new personnel system of April 2005, and recognizing that increasing an individual's abilities is linked to raising collective achievements and thus Isuzu's achievements, we have been providing various training programs for employees. In order to achieve our corporate vision of: "Being a Global Leading Company of Commercial Vehicles and Diesel Engines," we offer support for improving employees' performance through various training activities so that they can acquire the knowledge and insight to survive in this competitive world, although such requirements may differ with employees' positions and jobs.

Isuzu considers it important for the company's employees to make the most of their abilities to achieve their goals. The company motivates the employees to build their own careers and provides the managers with the opportunities to communicate with their subordinates regarding career building so that they can conduct career-oriented management. Isuzu has a system to follow up on such efforts. It also has "a job challenge system" (in-house FA system) to help the employees to tackle challenging jobs on their own responsibility and achieve self-improvement. Under this system, personnel changes take place according to employees' wishes.

## ■ Isuzu Motors Technical College

Isuzu Motors Technical College was founded in 1951 to provide technically oriented employees with basic knowledge and to foster future leaders. It was certified by the Governor of Kanagawa Prefecture as a vocational training school. The school has turned out many talented people, with 4,700 graduates since its foundation.

Isuzu Motors Technical College is an educational institution

where mainly basic knowledge and skills are taught, but greater emphasis is on teaching a proper attitude toward manufacturing. In everyday training, it teaches the importance of compliance with rules, concentration, teamwork, patience, passion and an earnest attitude in the process of manufacturing.

The school is nurturing personnel capable of leading a future Isuzu, while at the same time devoting its efforts to the type of training described earlier.



### Basic Training in Overseas Operations

To develop human resources required for a global leading company, Isuzu has been providing various kinds of training according to the ranks of the employees. Here is a message for our in-house journal from a staff member of the company who went to North America to participate in basic training in overseas business, one of our human resources development programs (overseas assignment for business training for a period of six months to a full year).

## Aiming to Acquire Customers' Viewpoints

Naoko Yotsuya, North America Operations Dept. (From Isuzu Commercial Truck of America)

I was in charge of CV sales for North America for three and a half years. My viewpoint was not as customer oriented as that of my seniors who had sales experience on their overseas assignments. That was why I wanted to participate in the training program in the hope of partly closing the gap.

Sales administration in North America is broadly divided into four sales regions, which are subdivided into seven or eight districts. Since the Southeast region I am working for has eight districts, I wanted to do the rounds of dealers with the staff members in charge and to hear what those selling trucks in the forefront of marketing had to say.

Once out of Japan, I felt the strength of Isuzu's human network

anew. Therefore, I wish I could help create an environment in which dealers would find it easier to sell vehicles by activating the human network and become able to speak for the market.





# Third Party Opinion

To ensure accuracy and fairness, we sought a third-party opinion on this report. This will be reflected within future efforts by Isuzu toward the creation of a sustainable society.



**Jiro Adachi**

Executive Director, Japan Center for a Sustainable Environment and Society (JACSES) (NGO)

In comparison to previous years, we see a number of significant achievements this year in terms of both product manufacturing and improvement of the plant environment, namely through such efforts as the attainment of certification for low-emission vehicles, compliance with the 2015 fuel efficiency standard, early achievement of the fiscal 2010 CO<sub>2</sub> emission target, significant reduction of the amount of landfill disposal of waste, and so on.

In addition, companies in the group have worked hard to involve drivers, and such efforts have been highly evaluated by outside parties as can be seen through the Award of the Minister of the Environment presented to Isuzu Engine Manufacturing Hokkaido Corporation and the MCPC Award 2007 Grand Prix for the *Mimamori-kun* system.

Such results are the fruit of efforts at both the top management and employee level, and I was delighted to read of them in this report.

I would like to take this opportunity to make the following suggestions on how Isuzu can further enhance its corporate presence as a valued global leading company.

The first point is integration of the “back-casting perspective,” under which companies review their current status from the forecast future status. Indeed, some companies have already set short-term targets based on medium- to long-term forecasts of how society will

evolve, such as in 2050. How about integrating such a long-term perspective in setting corporate targets, and using it to review your existing short-term targets such as that for achieving reductions in CO<sub>2</sub> emissions by fiscal 2010? For this purpose, it may be useful to establish a mechanism such as a consultation committee to incorporate external specialists.

The second point is reinforced implementation of positive actions and accounting via external parties. To be specific, we will propose reinforcement of environmental measures through tie-ups with automobile parts manufacturers. As a leading company in the automobile industry, which is coming under increasing pressure to reduce its environmental impact, and to enhance the trust of society, it may be worthwhile to consider more dynamic allocation of corporate profits to support environmental and social contribution activities, giving greater consideration to contemporary trends, under which companies are now offering full-scale support of nonprofit organizations (NPOs) or similar.

In this report, we saw no mention of the Tokyo Action on Air Pollution, though this may be attributable to the fact that the participants are still in the process of reaching an amicable settlement. However, presentation of the opinion of top management in regard to this issue in the next report should be considered as an important measure to further boost the trust of society.

## Response to Third Party Opinion

We very much appreciate the encouraging evaluation of our efforts, including in regard to product manufacturing, improvement of our plants and the *Mimamori-kun* system. Also, the frank advice on the challenges we need to address is extremely valuable in the process of determining our future strategies.

We are aware of the significance of the proposed points—namely “setting long-term targets based on the ‘back-casting perspective’” and “reinforcing implementation of initiatives via external parties along with boosting contributions to society”—in our efforts to assume corporate responsibility as a member of society and enhance social trust. We will make utmost efforts to achieve these objectives as early as possible and understand that further resources need to be allocated in regard to these aspects.

As to the proposal on “improvement of software” cited in the fiscal 2006 version of this report, we worked to enhance the *Mimamori-kun* system, and

reported this progress in this year’s report.

Meanwhile, as to the suggestion on our description of overseas consolidated management, we still have many things to do in the future. This is largely due to the great focus we have placed on environment-based initiatives, which have seen improvement, while social-based activities have been somewhat delayed.

Isuzu recognizes activities geared toward protecting the global environment as a top priority for corporate management. Indeed, we have positioned activities to halt global warming as an important challenge to be addressed at all levels of the company and accordingly expect each and every employee to make utmost efforts on a continuous basis to achieve the related goals. We will continue to serve society and improve its welfare by identifying what we can do to help, while reflecting the valuable comments on our future strategy.



**ISUZU**

**Cover message:** The cover design expresses our wish to treasure and handover this beautiful earth to the next generation. It also symbolizes our hope that our global business activities will help contribute to the symbiosis of man and earth.



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