

# Community and Social Relations

## Environmental Communications with Customers

### Providing Diagnostic Information on Vehicles in Operation and Recommending Appropriate Ways to Respond to New Regulations

The diesel-powered vehicles currently in operation are subject to regulations stipulated by Japan's Automobile NO<sub>x</sub>/PM Law and local governmental regulations such as the Tokyo Metropolitan Ordinance on Environmental Preservation. Consequently, operation of our customers' vehicles should be prohibited in some districts. In June 2002 we started a free consultation service using our diagnostic system for the influence of exhaust emissions regulations. With the system the "Eco Solution Plan", we provide our customers with a summary of recommendations about the possible influence of the regulations and the most appropriate action to take. In line with this plan, we provide diagnostic information about the influence of the new exhaust emissions regulations and recommend actions on a vehicle-by-vehicle basis.

- 1) We provide diagnostic information about the time the regulation goes into effect, whether the vehicle can be operated over the user's desired period, and the equipment necessary to reduce particulate matter.
- 2) We recommend the optimum timing of vehicle replacement and provide information on costs relating to the exhaust emissions regulations.

We also prepare reports to our customers to hand out to the other companies they do business with. Our reports explain ideas for ways to reduce vehicles' environmental impact. This is another part of our response to the social demand for green procurement.

In September 2002, we started providing this service on our website. By the end of June 2003, we had diagnosed about 200,000 vehicles of 6,000 companies and made due recommendations. They exhibited favorable responses, including "what equipment should this vehicle be equipped with?" and "We heard that it is the best way to ask Isuzu for information on exhaust emissions and the regulations."

[www.isuzu.co.jp/cv/](http://www.isuzu.co.jp/cv/)



Website screen for determination of effects concerning Japan's Automobile NO<sub>x</sub> and PM Control Law and the Tokyo Metropolitan Ordinance



Website screen for simulation of exhaust emissions reduction

### Supporting Fuel-Efficient and Safe Driving for Heavy-Duty Trucks

In January 2002, we started the operation of the "Mimamori-kun" next generation vehicle diagnostic system for the GIGA heavy-duty truck series. A range of driving data from on-board monitoring equipment is analyzed in order to provide diagnostic information and recommend appropriate ways to reduce fuel consumption and drive more safely. It is done on a vehicle-by-vehicle basis.

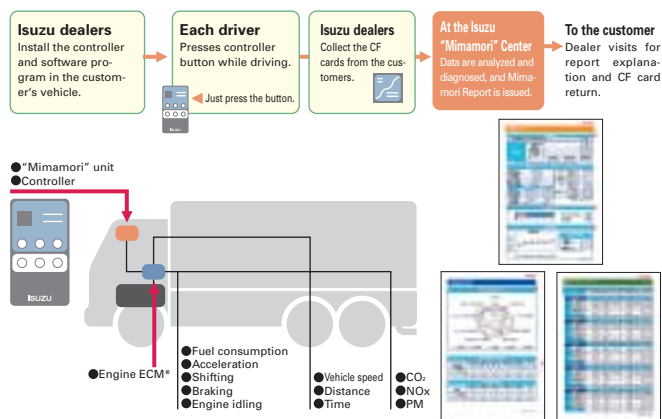
This system collects precise driving data from the engine control computer and analyzes it by vehicle operator, by cargo owner and by driving route, thus providing information on vehicle operation by each driver, detailed transportation cost data, and environmental data, including CO<sub>2</sub> emissions.

Several advantages were realized as a result of inauguration of this system, including 1) fuel consumption reductions thanks to advice on vehicle speed, shift-up engine RPM and gear shifting, 2) promotion of safe driving by suppression of maximum speed and decrease in frequency of hard acceleration and deceleration, and

3) vehicle life extension and repair cost reductions due to fuel-efficient and safe driving and by vehicle usage planning based on actual fleet operating data.

This system was operating on about 600 GIGA series trucks at the end of March 2003. Customers reported an average reduction of 15% in fuel consumption and highly appreciated this service. They also reported that significant improvements in safe driving aspects were achieved, including reduced average vehicle speeds during high-speed driving and decreased frequency of hard breaking.

#### Flowchart of "Mimamori-kun" System



\* ECM: Engine Control Module

### Driving Seminar to Improve Fuel Efficiency

Isuzu has sponsored driver training sessions since 1996, in order to promote fuel-efficient and safe driving. Currently, we are providing driver training sessions called the Isuzu Environmental Seminar in Hokkaido Driving Session or the Delivery and Safety Driving Seminar using actual vehicles, for the participants to learn knowledge and skills for fuel-efficient and high-quality transportation. In fiscal 2002, a total of 688 participants from 628 companies joined the sessions. We also provide the Fuel-Efficient Driving Session to teach fuel-efficient driving. Our overseas efforts for driver training are also highly appreciated. These include the Fuel-Efficient Driving Contest, sponsored by Tri Petch Isuzu Dealer of Thailand, and the Fuel-Efficient Driving Competition, sponsored by P.T. Pantja Motor of Indonesia.



Economy Driving Session

### Operations at the Isuzu Customer Center

In 1979 Isuzu opened the Customer Center to ensure direct communication with our customers. We systematically respond to comments and inquiries from customers and feed them back on our sales, development and other departments. We also provide information on frequently asked questions from customers and children on our website. We are endeavoring to answer their questions about exhaust emissions regulations accurately and sincerely, as public concern about exhaust has increased in recent years. Our service is earning a favorable reputation for the simplicity and clarity of explanations.

#### Isuzu Customer Center

<http://www.isuzu.co.jp/inquiry/>

TEL: 0120-119113 (toll free throughout Japan)

Service available from 9:00 to 17:00 on Monday to Friday (excluding national holidays and days specified by Isuzu.)

## Environmental Communications with Society

### Policy of Information Disclosure

We encourage active participation in society and in environmental preservation, as advocated in the Isuzu Charter on the Global Environment, established in 1992: "In order to leave beautiful earth to our descendants, not only through business activities but also as citizens of the earth, we will cope with environmental conservation activities of locality and society with positive stance" (see page 9).

To this end, we are working to promote employees' environmental communication with our customers and society. We also provide a wide range of information on our environmental activities through various media and events.

[www.isuzu.co.jp/company/eco/](http://www.isuzu.co.jp/company/eco/)



Isuzu website

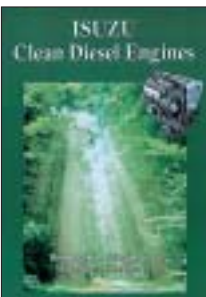
### Providing Information through Environmental Reports and Educational Booklets

Isuzu started publishing environmental reports in 1999 to help people to understand our environmental initiatives. We were Japan's first commercial vehicle manufacturer to publish such reports, and this fiscal 2003 edition is our fifth such report. We distribute copies at seminars, lectures, and environmental events organized by Isuzu, as well as other occasions, in order to provide this information to as many people as possible.

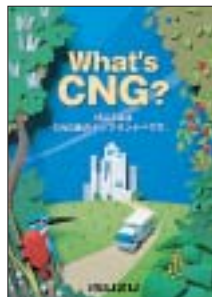
We have published "Diesel Seminar" booklet, which aim to promote a better understanding of diesel engines among the general public. We have also published "ISUZU Clean Diesel Engines" in English, which aims at promoting awareness about diesel engines worldwide, and "What's CNG?" in Japanese to answer questions about CNG-powered vehicles.



Diesel Seminar



ISUZU Clean Diesel Engines



What's CNG?

### Participating in Events and Exhibitions

Isuzu participates in a range of events and exhibitions. For example, in the Eco-Products 2002 exhibition we exhibited ELF KR series trucks, the particulate matter (PM) oxidization catalytic converter, and other products. Visitors to our booth were interested in Isuzu's environmental technologies, where the ELF KR series met high approbation.

In the Technology for Man and Vehicles Exhibition 2002, Isuzu exhibited the 4HL1 engine for ELF KR trucks, the "Smoother-F" and "Smoother-G" transmissions, technology for next-generation super clean diesel engines, etc., attracting many of the people who visited the exhibition.



Eco-Products 2002 Exhibition



Technology for Man and Vehicles Exhibition 2002

### Support for National South Pole Expeditions

In Antarctica, observations are made to clarify global environmental changes such as the ozone hole and global warming, as well as to investigate the actual status and mechanism of global phenomena, including auroras and meteorites. Isuzu has provided its engineers to support equipment installation and maintenance in national observational expeditions at the South Pole, since the first expedition by Japan in 1956 through the forty-fourth expedition in 2002. Our engineers support observations of the global environment in a range of duties, including maintenance of the diesel engines for vehicles and for base power generation, and maintenance and checking of the lifeline of the base.



Machinery Group Members of the Forty-third Expedition

### Environmental Communication and Contributions to Society at Individual Plants

Isuzu conducts proactive efforts to protect the environment in society and living communities, and is involved in a variety of initiatives mainly around each plant.

#### Major Environmental Communication and Contributions to Society at Each Plant in Fiscal 2002

Plant	Events/Projects	Implemented
Fujiwara Plant	2002 Fujiwara Environmental Fair	June 2002
	Clean-up of area around plant	Monthly
Kawasaki Plant	Clean-up of employee commuter roads, Tama River promenade, and Route 409	1 ~ 3' /month
	Issuance of "Environmental News," "Zero Emissions Bulletin" and "Saving-Energy News"	June and July, 2002
	Environmental suggestions campaign, plant manager's awards	June and July, 2002
	Received "Kanto Economic and Industrial Bureau Director-General Award for Efficient Use of Electricity"	February 2003
Tochigi Plant	With welfare facility of Ohira Town: Collecting, donating collected cans; assistance to the disabled	1 ~ 2' /month
	With welfare facility of Ohira Town: Cleaning uniforms, boots for reuse by seasonal employees	April 2003
	"Clean-up activities" in local community	June 2002
	Environmental suggestions campaign, in-house awards	June 2002
Isuzu Engine Manufacturing Hokkaido Co., Ltd. (Isuzu subsidiary in November 2002)	Clean-up of roads around plant	As appropriate
	Tomakomai City Tree Planting Festival, planted 200 fir trees	May 2002
	Tomakomai City Zero Emissions Network	7' / year
	Environmental Protection Partner Forum"	February 2003



2002 Fujiwara Environmental Fair



Aluminum cans collected once or twice every month and donated to a welfare facility for people with disabilities of Ohira Town.