

# Environment Committee Chairpersons' Policies

Here are messages on Isuzu's environmental conservation policy from the chairpersons of the sub-committees of the Isuzu Global Environment Committee, which started its operation in August 1990.



**Kozo Sakaino**

Chairperson of the Global Environment Committee  
Executive Vice President and Director

**My eco-friendly life**

"It's my policy to preferentially buy products with the Eco Mark and avoid unnecessary idling of electrical appliances at home. I try to use the bus whenever I can."

Our environmental activities are intended to accomplish two objectives. One is to develop cleaner vehicles and the other is to minimize the environmental impacts of our plants. I believe Isuzu will not be able to be a corporate citizen that is well accepted by society for long time unless we implement these bilateral strategies further than our stakeholders expectation.

Of the environmental activities of vehicle manufacturers, actions to meet exhaust emission regulations and other legal standards may be viewed as "passive" activities. While Isuzu certainly fulfills such obligations, we are not reluctant to make other "active" efforts.

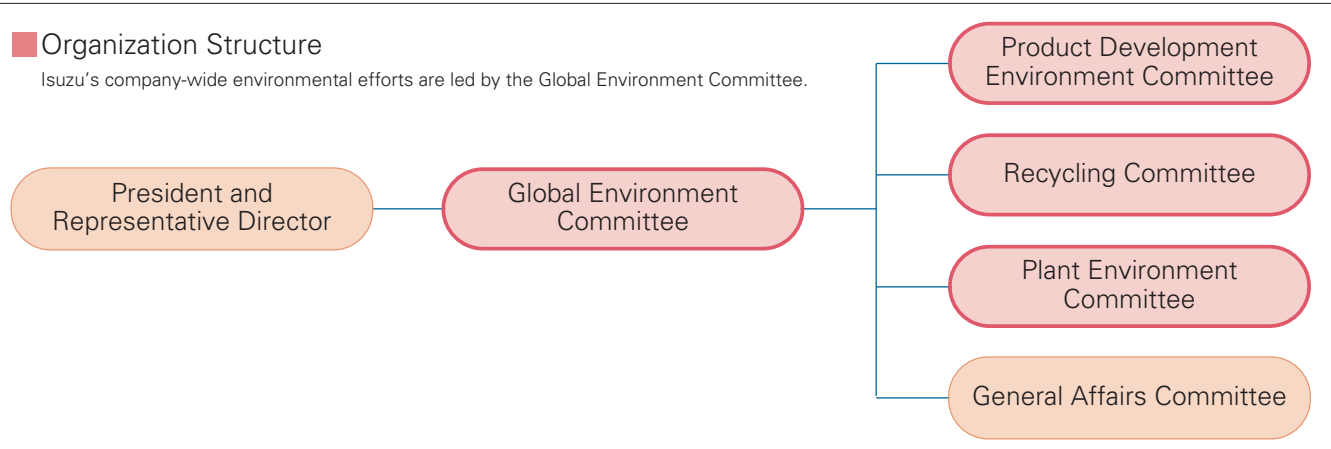
For example, we manufacture our truck chassis and bodies on a custom-made basis to meet customers' specific requests. In this process, we do extensive investigations to avoid useless structural design, use of unnecessary

parts, and other undesirable features, under test conditions that simulate the actual operation of the vehicle by the customer. Based on the findings, we suggest better specifications for the truck chassis and body to the customer. By continuing these initiatives, we will be able to dramatically improve vehicle economy indices, such as transport efficiency, fuel economy and vehicle life, not only on the user's side but also in society as a whole. I think it's Isuzu's responsibility to be a service company that contributes to creating a sustainable society, by proposing more efficient use of vehicles that places less load on the environment.

Our aim is to be an excellent service company that contributes to society by fulfilling the binary objectives of protecting the environment and improving driving economy in the cargo transport.

**Organization Structure**

Isuzu's company-wide environmental efforts are led by the Global Environment Committee.



**Isuzu Charter on the Global Environment**

(established in May 1992)

**Policies in Coping with the Global Environment**

1. Throughout the life of vehicle from production to usage and disposal, we will cope with the conservation of environment with positive stance.
2. 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.

**Action Directives**

1. In production processes of vehicles, we will minimize consumption of energy, control to minimize emissions, and thus cope with the conservation of environment.
2. With regard to exhaust gas, noise, etc. which are generated in the process of using vehicles, we will cope with reduction through development and production of vehicles. Also, through developing logistics systems, we will think out rational logistics and will thus cope with the conservation of environment.
3. Realizing that resources are finite, we will aim to provide vehicles which are loved by customers for long time, and we will, in order to make our vehicles recyclable in disposal process, thoroughly cope with the thought of recycling.



Isuzu is committed to preserve the global environment, and has taken the initiative to develop activities aimed at balancing economic development with environmental conservation. To this end, the Isuzu Global Environment Committee was established back in August 1990. In May 1992, we established the Isuzu Charter on the Global Environment with our special environmental logo including the slogan "FOR THE FUTURE OF MANKIND AND THE EARTH."



**Yoshihiro Tadaki**

Director  
Chairperson of the Product Development Environment Committee

In Isuzu's product development activities, we emphasize the three factors of safety, economy and the environment. Development of new technologies is especially concerned with the protection of the environment.

Although diesel engines offer the key advantage of emitting less CO<sub>2</sub> than gasoline engines, they have the drawback of producing more noise, vibration, nitrogen oxide (NOx) and particulate matter (PM). Throughout the life cycle of diesel-powered vehicles, from manufacture and actual operation to disposal, we seek to reduce environmental impacts in seven major areas, including fuel efficiency, exhaust emissions and external noise. We have been able to solve technically difficult problems by combining new technologies, including super high-pressure fuel injection, exhaust gas recirculation and an oxidization catalyst. We launched the ELF-KR light-duty truck series in June 2002, complying with tough new exhaust emission regulations that come into force in 2003. In June 2003, we introduced heavy-duty trucks and other vehicles equipped with the "Smoother-G" fully automatic mechanical transmission, which offers significantly reduced fuel consumption.

We are also meeting the social needs for the development and sales of an add-on kit \* to reduce particulate matter (PM) emissions for installation in vehicles already in use.

We will continue our efforts to develop cleaner diesel engines with an emphasis on both cleaner exhaust emissions and higher fuel efficiency.

**My eco-friendly life**

I enjoy gardening and am moved by beautiful greenery and the abundance of nature. It feels as restful as if I lived in the countryside.

\* Add-on kit to reduce particulate matter (PM) emissions: Oxidization catalytic converter



**Kuniharu Nakagawa**

Executive  
Chairperson of the Recycling Committee

I have been the chairperson of the Recycling Committee since the spring of 2003.

I feel our customers such as logistics companies and cargo owners have recently become increasingly aware of the issue of protecting the environment. Today it's a major concern of customers whether the vehicles they have operated are appropriately recycled after being transferred to buyers.

Recycling of used vehicles and sales of new vehicles can be compared to the two sides of a coin. It is important for the new truck salesperson to accurately understand the objective and necessity of recycling vehicles and to provide our customers with a full explanation about the current status of Isuzu's recycling efforts. This allows our customers to feel easy in purchasing our vehicles, thus earning their trust. I realize it's my duty to sincerely accept customers' comments, and accurately implement what is required for Isuzu to do.

We will work to establish an internal system that ensures the creation of easily recyclable vehicles, provision of a recycling system, and expansion of employee training to facilitate sales personnel's communication with customers concerning vehicle recycling.

**My eco-friendly life**

I enjoy trekking with my camera. It's my policy to bring back the trash I have generated.



**Hiromasa Tsutsui**

Executive Director  
Chairperson of the Plant Environment Committee

In each plant, we work to reduce the company's environmental impacts, with the aim of having "environmentally sound plants that are open to their communities." Our efforts include energy conservation, resources conservation, recycling vehicles, and pollution prevention.

In environmental activities at our plants, it is necessary to take basic radical actions courageously, backed with everyday efforts by all employees. As these efforts are made on a plant-by-plant basis, what to do varies according to products manufactured; collaboration with local recycling companies is of paramount importance in recycling our products. We must take carefully thought-out measures.

First, each plant must be well accepted by local communities in order to make local contributions. To this end, we will make efforts, not only to reduce our environmental impacts, but also to share ideas and information on environmental conservation with local communities. I believe these efforts are of great significance and high values as the public realizes more and more that such environmental initiatives comprise the essential part of our business.

**My eco-friendly life**

I enjoy gardening with my family, appreciating the beauty of flowers of each season. Recently, I have grown European bulbous plants. On holidays, I work out weeding my garden.

# Outline of Isuzu's Environmental Activities

Isuzu was the first company in Japan to manufacture a diesel engine and launch a diesel-powered vehicle. We are working hard to accomplish our goal of improving the driving economy and environmental quality of vehicle transport.

Diesel engines offer many advantages, including high fuel efficiency, excellent endurance and durability, and low CO<sub>2</sub> emissions. With these features, diesel engines represent an essential driving power-source for trucks that repeat high-load, long-distance operation with heavy cargo, and buses that transport a large number of passengers. The illustration below depicts Isuzu's business activities, including vehicle development, material procurement and vehicle manufacture, and the life cycle of a vehicle, from actual operation to disposal.

Trucks, buses and other commercial vehicles support our life, thus contributing significantly to society. It should be noted, however, that the image of diesel vehicles emitting black smoke and NO<sub>x</sub> still persists in Japan.

Isuzu has been working to develop cleaner diesel engines with reduced exhaust emissions; in June 2002, we launched the new ELF light-duty truck series, the first in Japan to comply with the new short-term emission regulations effective in 2003.

We are also taking various approaches to reduce the environmental impact of vehicles at every stage of the life cycle, i.e., procurement of materials and components, manufacture, disposal and recycling. For details of our proactive environmental activities by stage of Isuzu's business, please refer to the pages indicated in the illustration below.

### INPUT

Note: Figures in parentheses are for FY 2002

**Total Energy Consumption**

115,000 kl (109,000 kl)  
(crude oil equivalent)

- ⚡ Electricity 66% (66%)
- 🔥 Gas 19% (20%)
- 🛢️ Petroleum 15% (14%)

**Water consumption**

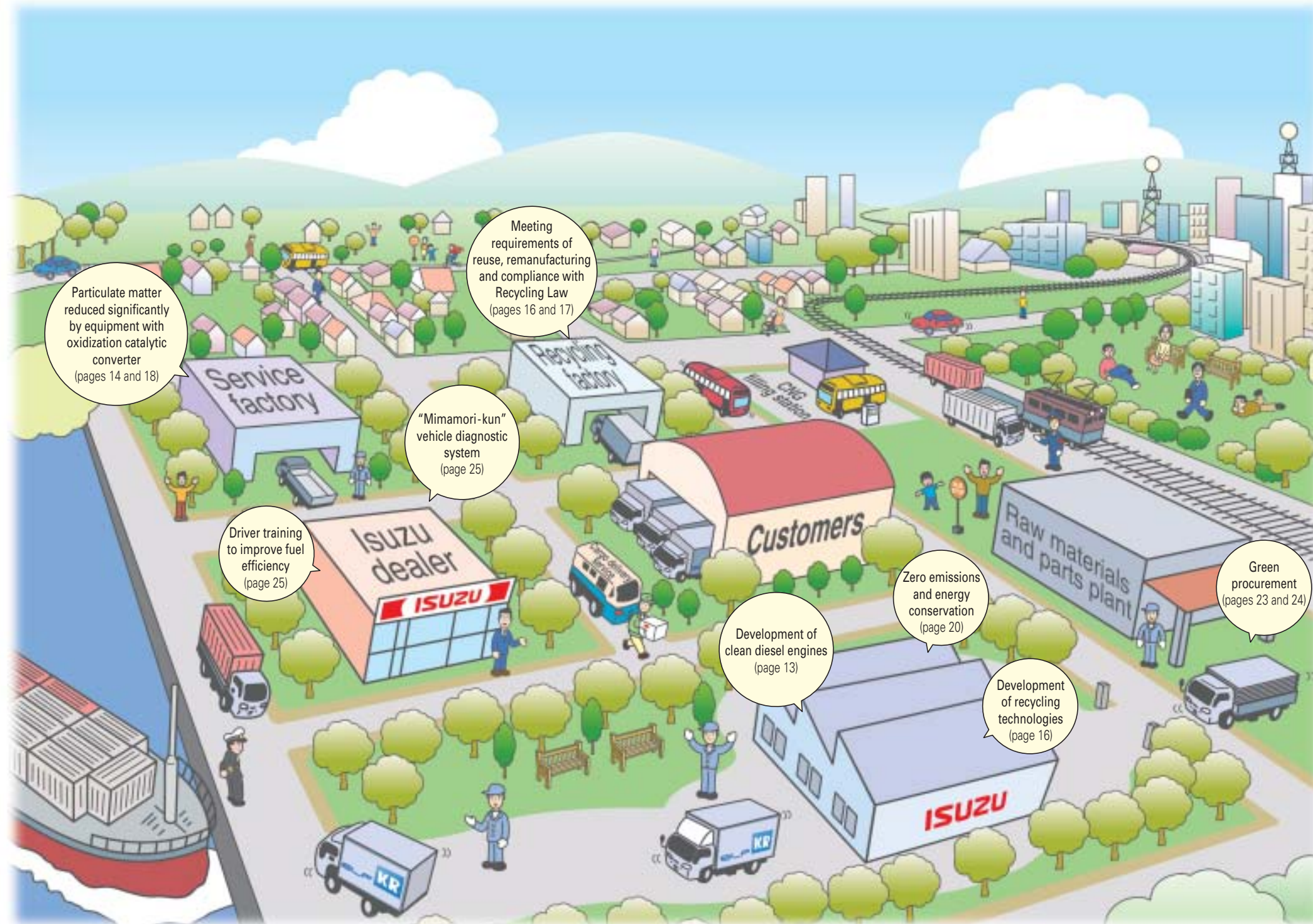
💧 2,320,000 m<sup>3</sup>  
(2,240,000 m<sup>3</sup>)

**Material suppliers**

🏢 Major suppliers 440 companies (470)

🏭 Manufacturing sites in Japan: 4 plants

👤 Employees in Japan 7,634 (11,226)



### OUTPUT

Note: Figures in parentheses are for FY 2002

**Products**

Sales: ¥760.6 billion  
(¥761.9 billion)

- 👤 Domestic Sales 60,000 units (64,000 units)
- 🏭 Exports 173,000 units (162,000 units)

**Air**

- 🌫️ CO<sub>2</sub> emissions 197,000 tonnes (184,000 tonnes)
- 🌫️ NO<sub>x</sub> emissions 52.7 tonnes
- 🌫️ SO<sub>x</sub> emissions 16.4 tonnes

**Waste**

- 🗑️ Total generated 59,100 tonnes (60,600 tonnes)
- 🗑️ Landfill disposal 600 tonnes (990 tonnes)

**Waste water**

- 💧 Water discharge 2.14 million m<sup>3</sup> (2.18 million m<sup>3</sup>)
- 💧 COD (Chemical Oxygen Demand) 30 tonnes (30 tonnes)