Glossary

3Rs (Reduce, Reuse, Recycle)
As waste material countermeasures, the 3Rs require reductions in the volume of waste through product resource conservation, longer life of products, and reduced generation of by-products in production processes (Reduce); reuse of components (Reuse); and recycling of components (Recycle).

ASR (Automobile shredder residue)
After disposal of fuel, oil, and the like by end-of-life vehicle dismantlers, the engines, transmission, tires, batteries, and other parts are separated and the remaining bodies and other parts are dispatched to a shredding facility. They are turned into shredder residue after steel and nonferrous metal particles are separated out for recycling. Recycling technology for this residue is now under development.

Compatibility
When a large car collides with a small car, generally the small car suffers greater impact. Therefore, the idea of compatibility is to optimize weight, rigidity, and height of the cars in order to reduce the impact from a large car as well as to reduce the damage on a small car.

Dioxins
This is a generic term that denotes polychlorinated dibenzo-p-dioxin (PCDD) and polychlorinated dibenzofuran (PCDF). Depending on the location and number of occurrences of chlorine, there are many types whose degree of harmfulness varies. There are some that cause deformities and some that are carcinogenic. Dioxins appear unnoticed in the manufacture and combustion of chemical substances. In the Law Concerning Special Measures against Dioxin (promulgated in July 1999), PCDD and PCDF, including coplanar PCB, are defined as dioxins.

Directive 2000/53/EC of the European Parliament and of the Council on ELVs
This directive regulates policies to improve the environmental conservation ability of automobile manufacturers and other related companies. It aims for reuse and recycling in order to prevent the waste generated from ELV (End-of-life Vehicles) and reduce waste disposal.

End-of-life vehicles
Automobiles, including motorbikes, whose use for transportation has ended, are disposed of by dismantling, destroying, burning, or burying in landfills.

Environmental impact
In the Environment Basic Law, this is “that which, as a result of human activity, affects the environment and is a cause of interference in environmental conservation.”

Environment management system (EMS)
Environment management system positions environmental conservation measures as one link in the corporate activity and involves the planning, implementation, and evaluation. Depending on the type of evaluation, measures are implemented to achieve certain objectives. The organizational set-up for administering these operations is the EMS.

Greenhouse gases
These are gases (CO_2, methane, CFC alternatives, and others) that absorb the heat (infrared rays) released by the sun-warmed surface of the earth and cause global warming. Green house gases absorb heat and warm the air but as their density increases as more heat is absorbed and the air temperature rises, resulting in global warming.

Law on Recycling End-of-Life Vehicles
The law obligates automobile manufacturers and other related companies to share the responsibility for recycling and handling end-of-life vehicles appropriately. Automobile manufacturers are obliged to recycle or appropriately handle CFCs used for air conditioners, shredding dust, and air bags. The law was established out of the need to 1) reduce the amount of shredding dust because of a shortage of dump yards of waste materials; 2) to prevent illegal dumping and improper treatment; and 3) to work on environmental issues, such as depletion of the ozone layer and global warming. This is thought to be an important law to create a recycling-based society in Japan. (This law was promulgated in July 2002.)

Law Promoting Green Purchasing
This law aims to promote procurement of environmentally aware products (products and services contributing reduction of environmental impact) by ministries, agencies and other central governmental bodies. It also aims to promote the creation of a society able to sustain development by shifting demands through promotions to provide adequate information on environmentally friendly products. (The law went into force in April 2001.)

Normalization
This is the vision of an ideal society where disabled and elderly people can live and act in the same way as others. Also, it means creating an environment aiming at such a society.

PRTR Law (Law Concerning Reporting of the Release into the Environment of Specific Chemical Substances and Promoting Improvements in Their Management)
This legislation requires ascertaining the situation of chemical substance emissions and reporting to the central government via local governments. The amount of pollutants emitted into the environment or the amount transferred as waste is registered, tabulated, and made public by the government. Class 1 Designated Chemical substances number 354. (The law went into effect in April 2001.)

Recycling-based society
As an alternative to the existing high-consumption, high-waste society, this is an economic society that aims at the simultaneous achievement of environmental consideration and the pursuit of economic reason through the reduction, reuse, and recycling of waste material, restricting as much as possible the use of new resources and minimizing the volume of emissions.

Stratospheric platform
The stratosphere generally means the atmospheric region from the troposphere at about 11 kilometers in altitude to about 50 kilometers in altitude. It has a thermal gradient opposite to the troposphere that the temperature rises as the altitude increases, and the air layers do not mix. Weather phenomena, such as typhoons and clouds, occur in the troposphere and hardly influence the stratosphere. The stratospheric platform is a flying body that stays in the stratosphere with the characteristics shown above. There are two types, the airship type and the airplane type.

Thermal recycle
This means not only simply incinerating waste but also collecting and utilizing them as thermal energy. For example, the thermal heat produced by incinerating waste is generally used for thermal resources such as air conditioners and hot water. Furthermore, they can be used as fuels by converting them into solid fuels such as refuse derived fuel (RDF) refuse paper and plastic fuel(RPF) and oil.

VOC (Volatile organic compounds)
This is a generic name for organic compounds that exist in the form of gas in the air. It includes trichloroethylene, tetrachloroethylene, formaldehyde, toluene, benzene, and xylene. VOCs have an ability to dissolve fats and oils, and they have characteristics that make them hard to decompose and burn. Consequently, VOCs were used as an ideal cleansing agent in the industry in 1970s, but they could be harmful (causing headaches and dizziness after suctioning) and carcinogenic.

Zero emissions
This aims at building a recycling-based society in which the recycling of waste from industrial and other activities and the prevention of waste generation results in a society with no waste. Zero emissions have a variety of meanings, but for FHI, it is the activities that bring a zero level of waste material disposed of in landfills.