Consideration for the Environment in Our Products

Main Efforts of the KHI Group

The KHI Group believes that one of the pillars of our Group Mission is to contribute to the environment through our products. We will make thorough efforts in implementing product assessments and complying to overseas laws and regulations and voluntary regulations in industry, and will continue to promote consideration for the environment in our products in the entire KHI Group.

Implementing Product Assessment

For newly developed and designed products, as well as for particularly important products, we implement product assessment for resources conservation, energy saving, and recycling with the goal of reducing the environmental impacts of products during their lifecycles.

Because specific evaluation techniques vary depending on the type of product, each division draws up "Product Assessment Rules," enabling responses suitable for the characteristics of its products.

Main evaluation items of product assessment are as shown right.

- Product weight reduction
- 2 Product energy saving
- 3 Longer product life
- 4 Product safety and environmental conservation effectiveness
- 5 Measures for product disposal and recycling
- 6 Environmental impacts when problems or other extraordinary circumstances occur
- 7 Provision of information for use and maintenance
- 8 Compliance with regulations

Responding to the ELV Directive , the RoHS Directive and the REACH Regulation

Since 2000, the ELV Directive, the RoHS Directive and the REACH Regulation have strengthened laws and regulations related to chemical substances in the EU. The RoHS Directive covers electrical and electronic equipment, so some of the products made by our Precision Machinery Company has met the directive. The ELV Directive covers automobiles, but excludes motorcycles. The Motorcycle & Engine Company, however, is participating in the voluntary efforts of JAMA , and Precision Machinery Company is also applying the directive to some of its products.

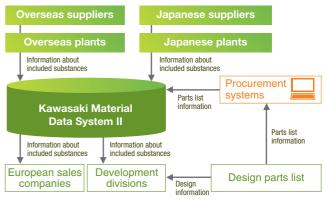
The REACH Regulation came into force in June 2007, and it applies to all chemical substances manufactured in or imported into the EU. Businesses that manufacture or import chemical substances in quantities of one ton or more are required to register and report those substances.

Our products are mainly articles and only a limited number of them are need to be registered. However, substances that are emitted intentionally or those of very high concern that may cause cancer must be registered and filed. In addition, there are regulations related to evaluation, authorization, restriction and communication of information, so it is necessary to have a system to determine information about the chemical substances included in our products throughout our entire supply chain.

The Rolling Stock Company, Motorcycle & Engine Company and Precision Machinery Company practice "green

procurement" (see p. 26 of booklet version) and respond to requests to determine chemical substance information, and the Motorcycle & Engine Company has created the KMDS II system 5 to collect data about chemical substances and respond to REACH and other chemical substance regulations.

Response to REACH in the Motorcycle & Engine Company



- ELV Directive: End of Life Vehicles Directive
- RoHS Directive: Directive on Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment
- REACH Regulation: Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals
- JAMA: Japan Automobile Manufacturers Association
- 5 KMDS II: Kawasaki Material Data System II

Efforts of the Motorcycle & Engine Company

Cleaning Exhaust Gas

As in the year before, in FY2009 we continued to clean the exhaust from motorcycles sold in Japan, making exhaust system improvements to conform with 2007 domestic emissions regulations. During the year, we launched the VULCAN 900 Classic, a large-displacement cruiser model with exceptional environmental performance.

In addition to an electronically controlled fuel injection system, the model has an O_2 sensor, which detects the density of oxygen in emissions to precisely control how much fuel is injected. The result is the optimal air/fuel ratio for the catalyst to function efficiently. The honeycomb catalyst also has a larger capacity, which enhances cleaning of harmful substances contained in emissions.



VULCAN 900 Classic

We also launched sales of the KLX125 and D-TRACKER 125 for beginning riders and riders of larger motorcycles looking for a second bike. These air-cooled, single-cylinder bikes bring fuel injection to the 125 cc and below class, achieving strong fuel economy and high enough environmental performance to meet domestic emissions regulations in effect since FY2007.

Promotion of 3Rs

Since October 2004, we have been steadily operating an autonomous motorcycle recycling system in cooperation with three other motorcycle manufacturers and 12 importers in Japan. Using this system, we have achieved a recycling rate of 87.6% in its sixth fiscal year (weight basis; calculated based on the treatment results at 14 recycling facilities).

Furthermore, for our new models of motorcycles, we are endeavoring to consider design for environment, including reducing materials and recycling, from the development phase. We conduct preliminary evaluations of our efforts related to reducing, recycling and reusing (3Rs) at the beginning of each of the design, prototyping and mass-production stages. In particular, through the use of materials that are easy to recycle, we are seeking to increase recyclability, and have achieved a potential recycling rate of over 90% for every model, with the majority of models scoring over 95%. This potential recycling rate was calculated based on The Guidelines for Definition and Calculation Method on the Recyclability Rate for New Vehicles (1998 JAMA).

Elimination and Reduction of Environmental Substances of Concern

For new motorcycles sold in Japan, we have already been achieving the voluntary reduction targets established by JAMA. In addition, we have also achieved the voluntary reduction targets for older motorcycle models that we have continued selling.

 Japan Automobile Manufacturers Association "Reduction targets for environmental substances of concern" for new vehicles

Substance	Reduction target
Lead 🏴	Use 60 g or less in and after January 2006 (for 210 kg weight vehicle)
Mercury	Use prohibited in and after October 2004 (Exception for the use of minute quantities in parts that are necessary for traffic safety
Hexavalent chromium	Use prohibited in and after January 2008
Cadmium	Use prohibited in and after January 2007

Used batteries are already recycled and excluded from the target values

Combination lamps, discharge headlamps, etc.

For general purpose engines, JET SKI® watercraft, there are no Japanese regulations like the JAMA voluntary reduction targets, but we are making elimination and reduction efforts that follow those applied for motorcycles, and we had achieved voluntary reduction targets for lead, mercury and cadmium by FY2007. Hexavalent chromium had been contained in a very small amount of parts, but we completed its elimination in FY2008.